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ABSTRACT

The purpose of this report is twofold: (1) it describes a study of the feasibility of creating a national organization to stimulate, develop, integrate, and lead a movement for performance-based teacher education and certification; (2) it proposes creating such an organization. Part 1 is entitled, "A Center of National Leadership for the Performance-Based Teacher Education Movement: The Feasibility Study." This section discusses the content of the study, the goals of the feasibility study, the science and art of performance-based education, and the hope of establishing a national commission on performance-based teacher education. Section II, entitled, "The Design for a National Commission," discusses the organizational structure of the commission and major programs of the commission. Lengthy appendixes, which are included in a separate volume, include: (1) notes on meetings with outside consultants; (2) vitae of coordinating committee members; (3) activities of coordinating committee; (4) program manager position description; (5) model development proposal; (6) a program of training institutes for managers of performance-based teacher education programs; (7) plans for a national information clearinghouse on performance-based education; (8) a program for a national survey and analysis of current performance-based education programs and resources. (SK)

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A NATIONAL COMMISSION ON PERFORMANCE-BASED EDUCATION: ITS FEASIBILITY, PROPOSED ORGANIZATION, AND PROGRAM

Volume I

A Report to the Rockefeller Brothers Fund

Project Director

Frederick J. McDonald

Associate Project Director

Horace Aubertine

Coordinating Committee

Theodore Andrews	Karl Massanari
Howard Coron	David Potter
James Deneen	Myrtle Rice
Jack Hollister	Allen Schmieder
Robert Houston	

Educational Testing Service
Princeton, New Jersey
December 1972

EDUCATIONAL TESTING SERVICE
PRINCETON, NEW JERSEY

THE FULL REPORT

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Submitted by:	Educational Testing Service Princeton, New Jersey 08540
Project Director:	F. J. McDonald Frederick J. McDonald Division Director 609-921-9000 extension 2520
Transmitted by:	Russell W. Martin, Jr. Russell W. Martin, Jr. Assistant Treasurer 609-921-9000 extension 2025
Duration:	February 1, 1973 to January 31, 1974
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New Proposal

Preface

We wish to express our gratitude to the many people who advised us during the period of our study. We received many ideas, which appear in this report in one form or another. Most of this advice was given in the context of critical discussions which were always lively and stimulating. The consequence was that we explored all aspects of the performance-based teacher education movement, thoroughly examined a variety of proposals, and developed a focus and a program of action which we think is unique.

The project director wishes to express his personal gratitude to the members of the Coordinating Committee who spent many hours thinking and writing about the ideas presented here. They produced this report, and if the National Commission on Performance-Based Education proposed here is successful, the largest measure of credit belongs to them.

Frederick J. McDonald
Project Director

TABLE OF CONTENTS

Volume I

Part I: The Feasibility Study 1

The Context of the Study 2

Goals of the Feasibility Study 10

The Science and Art of Performance-Based Education 18

The Promise of a National Commission on Performance-Based Education 31

Part II: The Design for a National Commission 34

The Organizational Structure of the Commission 35

The Major Programs of the Commission 44

Volume II

Appendix A: Meetings with Outside Consultants 1

Appendix B: Vitae of Coordinating Committee 39

Appendix C: Activities of Coordinating Committee 72

Appendix D: Program Manager Position Description 91

Appendix E: Model Development Proposal 94

Appendix F: A Program of Training Institutes for Managers of Performance-Based Teacher Education Programs 108

Appendix G: Plans for a National Information Clearinghouse on Performance-Based Education 115

Appendix H: A Program for a National Survey and Analysis of Current PBE Programs and Resources 119

Part I

A Center of National Leadership for the Performance-Based Teacher Education Movement: The Feasibility Study

THE CONTEXT OF THE STUDY

This report has a double purpose: (1) it describes a study of the feasibility of creating a national organization to stimulate, develop, integrate, and lead a movement for performance-based teacher education and certification; (2) it proposes creating such an organization. Although the twofold purpose is adhered to in the organization of the report, both parts are explained and developed throughout in their relationship to the rationale for the performance-based education movement: its philosophy and its emergent technology.

The feasibility study was undertaken because the fragmentation of the movement appeared to be eroding its potential support: its advocates had been moving in directions that were either unrelated or at cross-purposes. Worse, recently recommended changes, demanding complete reorganization of programs, new functions for faculties, and new styles of learning for students have, by their scope, exacerbated fears and encouraged restiveness.

Indeed, some of these fears are not entirely unrealistic. In recent years, both the states and schools of education have engaged in a flurry of activity with regard to teacher evaluation and certification. Each move has in its way presented problems. Several states, for example, have either enacted legislation or taken administrative action to change the rules governing certification. They are asking candidates to present evidence of demonstrated teaching competence or requiring schools and departments of education to develop programs emphasizing the acquisition of teaching competence. Some have even proposed that certification be renewed periodically, and that the criteria for such renewals be based on evaluations of demonstrated teaching competence. Assuredly, such actions will be a powerful stimulus in changing programs for the education of teachers, but they have aroused anxiety and even hostility. Teacher educators resent the imposition of changes by the state or they claim that too much is expected too soon or they are threatened by the dilution of the university and colleges' traditional control over the education of teachers.

Schools of education, too, have begun to develop performance-based programs, but these efforts are generally unrelated. One consequence of uncoordinated development is that teaching competence has come to be defined in many different ways--not necessarily incompatibly, but with no clear relation to each other. If programs were to continue developing in this manner, it would be difficult to specify minimum levels of competence for all teachers. Nor would there be any way of determining whether teachers educated in one program were more or less effective than those educated in another.

Disparate efforts, furthermore, dilute the limited resources available for development. Exchange of ideas, methods, and materials continues to be extremely limited. Thus, each new developmental enterprise perforce begins about where its predecessors did, by defining anew teaching competencies and by developing its own instructional and assessment systems. The inevitable consequence of such isolation is that new programs emerge very slowly, and they unfortunately aggravate the anxiety of those seeking to satisfy demands for rapid change. Moreover, many new programs are liable to charges of parochialism or idiosyncrasy.

Thus, despite great interest and purposeful movement toward change, there is a squandering of resources, disparity of effort, and too-slow progress in creating viable programs. In the absence of common conceptions about the nature of teaching competence and of assessment systems for measuring it, the impact of the initiated changes is deflected. This dilemma permits those opposed to change to exaggerate the difficulties inherent in describing and measuring teaching competence and hence to claim that the movement can never succeed. But even the sympathetic are disheartened by the overwhelming quantity of work needed to bring about effective change in the context of an uncoordinated movement.

Nevertheless, there continues to be genuine interest in and commitment to evaluating teachers' effect on student learning. This climate of opinion has arisen because both professionals and laymen are distressed with the quality of teaching, as each year yields further evidence that large numbers of children are not mastering the basic skills. The ennui of youth, the drug culture, the dropouts, the counter-culture, the disorder in the universities have all also been taken as evidence that the American educational system is somehow inadequate to its responsibilities.

Explanations offered to account for these phenomena have often been absurdly simplistic, and the proposed solutions have been, to say the least, bewildering in their diversity. There are calls, for example, for alternative schools, for a deemphasis on schooling, for the initiation of statewide assessment of student learning, for the passage of accountability laws, for delaying the granting of tenure to teachers, and for their periodic recertification. But there is a common call: something must be done to improve the quality of teaching in American schools. Many suspect, and with good reason, that teachers lack sufficient instructional skills. Teachers are further seen as insensitive to students, unable to motivate or help them to learn, and unable to adapt their teaching to changing social mores and life-styles.

The impugning of teachers has probably been too sweeping: in many instances it is little more than bewildered scapegoating. But the post-World War II era has lavished large sums on improving teachers' salaries, school facilities, and curricula. It is therefore hardly surprising that the public thinks it now time to demand improvements in educational results. This accounts for their interest in improving the effectiveness of teaching.

There is surprising consensus on the cause of ineffective teaching It is generally believed that the programs of schools and departments of education are at fault because they teach about teaching rather than facilitate the practical acquisition of teaching competence. Programs for prospective teachers typically comprise courses set in the traditional academic mold: fixed hours for lectures and discussions, assigned readings, and periodic tests. Grades in such courses mean just about what they usually mean in academic courses -- they denote standing of the student relative to others in a class. But they are rarely measures from which an accurate estimate of teaching competence may be made.

Where minimal practical experience is indeed provided, it may be inadequately supervised. Moreover, if a prospective teacher performs poorly in practical work, the only consequence to him is a lower grade. He is not prevented from moving into a teaching post. It is a safe generalization, in any case, that graduates of most programs have had very little direct teaching experience and that practically nothing is known about the prospective teacher's instructional skills or potential.

The status quo is prolonged year after year -- not because teacher educators or their students are unaware of the predicament, but because of impediments to developing comprehensive alternatives. It is obviously difficult to change the academic course structure where habit impedes imagination. Further, although there are few who do not pay lip service to the value of practical experience, educators are often loath to scant, for its sake, what they regard as important theoretical knowledge (no matter now remote or tenuous its relevance to practice). When more practical experience, such as internships, is added to programs, it is not infrequently more of the typical under-supervised kind. Obviously a comprehensive reform is badly needed.

Those who advocate the shift to performance-based teacher education programs are seeking just such radical change. This change should achieve, before all else, an educational program that trains for and assesses teaching competence. Another important goal is to change teachers' ideas of professional responsibility and to help them learn the attitudes and skills required to assume this new responsibility.

Professional responsibility should mean that teachers accept the charge to evaluate the quality of their teaching and to improve it. Accountability should not, of course, have to be imposed on teachers. But if teachers are to be more responsible in this sense, they cannot be educated as they are now. The prospective teacher typically plays a passive role as a student, with little responsibility for self-direction and self-evaluation. The consequence is a person who enters the profession expecting to be monitored and evaluated by others and expecting to be told how to improve. When such help is inadequate, as it all too frequently is, teachers can be mired in helplessness, an impasse they seek to circumvent by routines that may reassure them but that offer few benefits for their students. Since the goal of performance-based teacher education programs is to produce teachers who can assume responsibility for personal improvement, the programs emphasize self-evaluation and learning how to learn on one's own initiative.

The advocates of performance-based teacher education programs are urging significant changes in the goals, methods, and spirit of programs for training teachers. The most important of these changes is to be the primary purpose of the students' work and, consequently, of the criterion by which the program is to be judged: the student's goal must be the achievement of instructional competencies. These are defined as specific teaching skills and combinations thereof whose acquisition the student must demonstrate to some pre-specified level of performance. The trainee is not to be permitted to move through the instructional system until he has demonstrated that he has acquired competence at each step and level; he may not graduate or complete requirements simply by taking courses.

Designers of performance-based programs also advocate creating instructional modules whose function is to facilitate acquiring each specific teaching skill. When this paradigm is applied, one result will be to eliminate the traditional structure of courses. Another result will be the student's greater freedom to learn and responsibility for his own learning. That is, each trainee will be permitted to demonstrate competence as quickly as he or she feels ready to. Nor will the trainee be obliged to go through any instructional module if he or she can demonstrate the competence for which the module would prepare him. In effect, the student may design an individualized course of preparatory studies.

One of the most significant changes advocated is emphasis on the style and spirit of the methods for evaluating students' achievement of competence. These methods must above all evaluate teaching performance; assessment of knowledge about teaching is only of secondary importance. Evaluation will be made against a pre-specified criterion (which means that traditional grading systems will disappear). Evaluations must help clarify what the student needs to do to improve. The student is to be encouraged and helped also to evaluate his own competence. Finally, a product of the evaluation system would be a well focused picture of the student's strengths, so that he and others will know what he does well and where he functions with only minimal competence.

Such changes are not mere gimmickery; their purpose is not to eliminate the traditional in favor of modish innovation. Rather, their intent is to reform teacher education by changing its focus, emphasis, and methods. Their effect will be to promote institutional and professional accountability through comprehensive and objective evaluation of teaching skills.

We have come to believe that only if programs can be changed to emphasize and facilitate the growth of teaching competence, and only if those students who have demonstrated competence may be certified to teach, will any substantial improvement be made in the educational profession. It is this belief that has spurred the performance-based teacher education movement. Thus, if the movement is to achieve its goals of reforming teacher education, descriptions of teaching competence must be expeditiously developed and their validity must be tested. Instructional and assessment systems must similarly be designed and tested. But these are not simple tasks; they require a massive effort.

If the promise is great, then the lack of direction, coordination, and leadership is a critical matter. There is a very real danger that the combination of rising expectations about what performance-based teacher education can accomplish, and the need to meet the rapidly changing requirements for certification will catch the universities and colleges unprepared.

The feasibility study described in this report was conducted to determine what could be done to create leadership and hasten its development, to stimulate the movement's rapid growth, and to resolve its problems especially in the context of a pressing situation in which certification requirements are changing while institutions are ill-equipped to meet them and school systems unprepared to participate in training and evaluating new teachers.

GOALS OF THE FEASIBILITY STUDY

One of the major goals of the feasibility study was to determine whether there was widespread concern about the directions which the performance-based teacher education movement was going in and whether others felt the need to organize present efforts into a comprehensive and coordinated movement, with well-defined goals and articulated programs of research and development. Was our impression that there was a lack of leadership a valid assessment? Was there a desire to organize into a coordinated and integrated movement? Did others see the need for national leadership and direction? Would they be willing to work together to create a national center?

A second goal was to assess the state of the art. What was actually being done? How many and what kinds of programs had been initiated? What kinds of instructional materials were available for widespread use? What resources might be available for future developments? Who were the leaders in the movement and what had they accomplished? What organizations were expressing an interest in performance-based teacher education? Were there groups or persons likely to oppose the development of performance-based teacher education and certification?

The third goal was to determine what kinds of programs of research and development needed to be initiated. How could those working on performance-based programs be brought together to interrelate and integrate their efforts, to use each other's work, to create centers of performance-based teacher education serving as models for emulation or adaptation? What needed to be done to anticipate problems that were obviously emerging when faculties and certification officers attempted to create performance-based teacher education programs and certification systems? Did an organization need to be created to lead the movement, and if so, what kind of organization: what would be its purposes, its programs, its resources?

The work of the feasibility study was organized to answer these questions. This report describes the answers to these questions at this point in time.

Procedures

Two general methods were used to construct the study. First, we engaged in extensive consultation on the need for creating an organization to lead the performance-based teacher education movement. Second, we analyzed the current state of the art, out of which emerged the proposals for action.

Between February, 1972 and August, 1972, we held three major meetings. At the first meeting in Atlantic City, in February, 1972, we assembled a number of persons who were of national prominence in teacher education to seek their advice on the need for a national organization and on the characteristics such an organization might have. Originally, we had considered forming a consortium of the states which were already making rapi[illegible]ress in stipulating new requirements for certification. Those present at this meeting told us that there was a great need for coordinating the performance-based teacher education movement, but they urged us to consider other ways of structuring such an organization. They argued that integrating the programs of the states was too difficult because of the diversity of these programs and because creating a consortium of states would be fraught with political problems.

The second meeting was held in Princeton, in March 1972. Deans of schools of education, directors of teacher education programs, and state certification officers were invited to attend. The invitations went to those states and institutions which were presently making changes or which had plans to do so. This group comprised those persons who would have to give their consent to organizing the leadership of the performance-based teacher education movement. They were those whose cooperation and assistance were essential to the creation and influence of a center for national leadership.

This group also assured us that organizing the movement, particularly if it were directed to solving certain problems, was essential. Much of the meeting was spent in describing what needed to be done to make performance-based teacher education a reality.

A third meeting was held in Princeton, in August, 1972. We invited to this meeting those known to be making major contributions to research and development in performance-based teacher education. By this time we had formulated a tentative concept of the kind of organization needed. We asked the conferees for their ideas on the kinds of programs a national organization should undertake. Again, this meeting was of critical importance because the advice and consent of the individuals present would eventually be necessary if the center for national leadership were to take form. A detailed description of the purposes and discussions of these meetings as well as a list of the participants is presented in Appendix A.

There was almost unanimous agreement that the performance-based teacher education movement needed leadership. Those who were doubtful thought a national organization might not be practical because of the diverse institutions to be involved. Some were also concerned that centralized leadership might be too restrictive. Most of the advisors, however, agreed that this very diversity required a center to focus and coordinate it. They also thought that if a national organization provided for genuine participation of all concerned, consulted extensively, and worked with what was being done, there would be no reason to fear undue influence. Much of the discussion centered on what kinds of problems needed to be solved, what kind of organization should be created to facilitate their solutions, who should be involved in the organization, and how it might help work already underway. From these discussions emerged a very clear idea of the kinds of problems that needed solution. It was also apparent that there would be willing cooperation in an organization if participants were assured of an effective role in its creation and development and if its undertakings facilitated their present work and did not seek to supersede it.

Our second method for conducting the feasibility study was to create a Coordinating Committee which served as a continuing body, to determine what was occurring in the performance based teacher education movement, to assess its stage of development and its worth, to analyze the substance of the discussions conducted with many educators and researchers, and to refine a concept of a center for national leadership in the movement. The Coordinating Committee was created shortly after the Atlantic City meeting and worked on this study over the next eight months. The persons who were asked to join this group were themselves leaders in the performance-based teacher education program. Each was involved in a significant way in the work of creating performance-based programs, had many national contacts that served as a source of information for the Coordinating Committee, was deeply committed to the idea of creating a center, and was willing to spend his energies to create one.

The members of the Coordinating Committee were: Mr. Theodore Andrews, Bureau of Teacher Education, New York State Department of Education. Mr. Andrews is director of the Multi-State Consortium, a project to coordinate the efforts of state education departments in developing information and management systems for performance-based certification systems; Dr. Karl Massanari, Associate Director, American Association of Colleges of Teacher Education, and Chairman of the AACTE's Committee on Competency-Based Education; Dr. Robert Houston, Director of the Performance-based Elementary Education Program, University of Houston, and coauthor of Competency-Based Teacher Education; Dr. Howard Coron, Director of New York University's Project on Performance-Based Teacher Education, one of the trial projects approved by the New York State Department of Education; Dr. Horace Aubertine, who served as Associate Director of this project. Dr. Aubertine is Coordinator of Teacher Education at Illinois State University, one of the largest teacher-training institutions in the country, where there has been active development of performance-based programs and which conducted a program of research on performance-based assessment in conjunction with Educational Testing Service; Dr. Frederick J. McDonald, Project Director of this study, is Director of the Division of Educational Studies and chairman of the Teacher Behavior Research Group at Educational Testing Service: Dr. David Potter, member of the Teacher Behavior Research Group at Educational Testing Service. Dr. Potter is director of the ETS participation in the Hofstra Consortium, another trial project approved by the New York State Department of Education; Mr. J. Hollister, Executive Associate to the President of Educational Testing Service, and the Project Director for the Conant Studies of Teacher Education; Dr. Allen Schmieder, Bureau of Educational Personnel, U.S. Office of Education, joined the group in the later stages of the study; Dr. James Deneen, Director of Teacher Examination Programs, Educational Testing Service, contributed valuable advice to the Committee over the period of its work.

Each member participated in many meetings with colleagues who are developing representative programs in performance-based teacher education. Dr. Coron, for example, served for the Sears Foundation in the University of Toledo's program, one of the most completely developed in the country. Dr. Massanari has been in touch with practically every performance-based program in the United States. Dr. Schmieder has helped to develop the major programs in performance-based education supported by the Office of Education. Dr. Aubertine kept us current on the work of the Illinois Task Force on Performance-Based Certification. Dr. Deneen has worked with the Teacher Licensing Board of the State of California and the California Teachers Association on plans for implementing the state's new certification law. Dr. Houston is one of the most frequently called upon speakers on performance-based teacher education, and is a member of a group of directors of the Model Elementary Education Programs, a project supported by the Office of Education, and one which has had considerable influence on the growth of competency-based programs. Mr. Andrews' Multi-State Consortium project has joined together the certification officers in those states that have made the most progress in changing their state certification laws; Dr. Potter is chairman of the Task Force on the Definition of Competencies of the Hofstra Consortium. The credentials of these professionals are described in further detail in Appendix B.

The Coordinating Committee met once a month for several days at a time, and on two occasions it had working periods of four and five days.

The members also served as sounding boards for those attending the three meetings discussed above. Further details about the work of the Coordinating Committee may be found in Appendix C.

One outcome of the Committee's exploratory work was a foregone conclusion: they could find no common focus for development in extant programs. Moreover, they discovered no common goals toward which programs of research were moving. Such funding as had been made available was being used principally for stimulating interest in the concept of performance-based education. Further, it became apparent that many of our colleagues, concerned about the blunting of efforts, genuinely desired leadership. The task of the Coordinating Committee, therefore, was to design both an organization and a program acceptable to the committee and involved, one that would satisfy their multiplying needs.

A major idea about how to organize a center for national leadership emerged in these discussions. Our problem was to create an organization, but what were we to organize? Originally, as we have noted, we thought of organizing around states that were changing their requirements for certification. But our advisors stressed that the proposed organization should be independent. It could not lead if it had to cope with the problems that would inevitably arise if it were linked too closely to existing institutions. They also stressed how important it was that this organization be flexible. They meant that it should have the freedom to begin new programs expeditiously, seeking to involve persons whose knowledge and skill were most relevant to the task at hand. Out of our discussions of this advice emerged a concept of an organization unencumbered by bureaucratic sloth, parochial interests and local commitments, an organization free to find the best talent for its work, free to consult widely and to involve persons in various ways.

We decided that a National Commission (whose characteristics will be described in Part II) was the most promising method for organizing such a center of national leadership. But we needed to decide what this Commission ought to do. What specific programs should be the substance of its work? Our study of the current state of performance-based teacher education led to the inevitable conclusion that it needed as underpinning an integrated program of research and development on teaching competence, on what were the most effective ways to train for it, and on how to evaluate it. It will be useful in understanding our proposals for both the structure of the Commission and its programs to consider what we learned when we examined what was happening as performance-based teacher education programs began to develop and as the idea of such programs began to stir interest.

THE SCIENCE AND ART OF PERFORMANCE-BASED EDUCATION

We needed to know how far the science and art of performance-based education had advanced because the National Commission was to mount a program of research and development. If there were sufficient knowledge about teaching competence that could be applied, then the research and development program ought to be directed to developing instructional systems so that teachers acquired this knowledge and the skills derived from it. If, however, there was an inadequate scientific basis for stipulating what competencies a teacher ought to acquire, then the Commission should stimulate the development of this knowledge.

A related question was, how much is known about the practical arts of teaching that might both be used in training teachers and be a starting point for research? Many practical arts develop before there is a body of scientific knowledge that supports the practice; medicine and engineering are notable examples.

Similarly, we might ask whether the educator of teachers is already so skilled in the arts of training teachers that he or she can readily apply what is known to a new style, a new modality for educating teachers.

Research on Teaching Skills

What do we know about those kinds of teaching competence that are likely to affect significant changes in students? First, there is yet to be developed a description of the essential competencies required for teaching. For many reasons--comparatively little research, inadequate research, impoverished conceptualizations of the nature of teaching--the research on teaching competence has not produced enough knowledge from which to derive a clear concept of the goals of a performance-based teacher education program.

The lack of a substantial scientific foundation to support the choice of teaching skills to be learned does not mean that professional educators or teachers themselves have no idea as to relevant competencies needed in teaching. There is a rich, if not overabundant, literature on teaching and teaching skills. But the concepts, theories, and hypotheses about teaching skills necessary to produce certain desirable changes in pupils are largely untested. To say that they are untested does not mean that the ideas are worthless, only that their validity remains to be demonstrated.

Further, some of these concepts of teaching are contradictory; that is, if one were to accept one theory or one concept of relevant teaching skills, he ought not to accept a competing theory or concept. Many of the theories are still only vaguely described. There are, to be sure, lists itemizing highly specific skills, but their interrelations are still unknown. Still, this body of knowledge will be a rich base from which to ultimately derive more valid concepts of specific teaching skills.

It is essential to grasp the significance of this point. We cannot assume that creating performance-based teacher education programs is simply a matter of devising a better program of training. It is simply not sufficient, for example, to add more practical experience to teacher training programs or to make these programs, in the current jargon, "field-centered" without first answering the critical question: for what competency shall this practical experience train?

The Development of Assessment Strategies and Procedures

The concept of a performance-based teacher education movement dictates that evaluations be made of the teaching skills acquired by students so educated. Performance-based programs provide for continuous training and evaluation of the candidates until they reach a specified criterion level of performance. Both the acquisition of specific teaching skills and of general teaching competence must be assessed and evaluated.

Many of the persons with whom we consulted pointed out again and again that the greatest lack in the performance-based education movement was assessment strategies for evaluating competence. There are several reasons why this is so. First, the assessment of teaching performance is an undeveloped field of measurement. There are measures of subject-matter knowledge teachers must have, measures of knowledge about the psychology of teaching and about teaching methods, and measures of teachers' attitudes and values. These are not, of course, measures of teaching performance. The relevance to teaching skill of what they measure has yet to be demonstrated. Not only do new techniques have to be devised to assess teaching performance, but also the decision-making strategies required for evaluating teaching competence must be developed.

Apart from a large number of observational systems of variable quality, there are, however, no measures of teaching skill. Existing observational systems are based on some concept or theory of what constitutes adequate teaching. One assumes that they are valid measures of teaching performance only if one can grant that what they are measuring is a teaching skill. But in fact many lack the necessary characteristics of an acceptable measuring instrument.

The second reason that teaching-performance assessment strategies have not been developed is that the instructional strategies and systems used in performance-based teacher education programs must be different. Unlike much traditional testing, performance assessment is not designed to select those who already have high aptitude for teaching. Neither is the function of performance assessment to describe large groups of teachers in terms of where they stand with respect to each other in teaching skill.

Teaching-performance assessment will have two purposes; one purpose will be to provide the teacher educator with continuous information on the acquisition of specific skills by the teacher trainees. The teacher educator needs to know, as the candidate proceeds through the instructional program, whether or not he or she has reached specified criterion levels for specific teaching skills.

The second purpose of performance assessment will be to provide the teacher educator with information that he needs to make a summative evaluation about the competence of a teacher that is to be certified. Summative evaluations must tell the teacher educator whether or not the specific skills have been integrated into complex behavioral patterns which the teacher trainee can adapt to a wide variety of teaching tasks, such as those associated with differences in pupils, differences in purposes, and differences in the conditions in which learning takes place. The teacher educator needs to know whether the teacher trainee will perform as a competent teacher consistently on a day-to-day basis under normal teaching conditions. He also needs to know the specific capabilities or aptitudes that fit one teacher for one type of specific teaching situation or problem rather than for another.

Two concepts prevail in most discussions of what performance assessment should be like. One of these is that assessment procedures should be criterion-referenced: that is, the level of attainment of a teaching skill should be specified, and the trainee should not move from one training component in a system to another until he or she has reached the specified criterion level for the performance in the first training component.

The second concept is that the assessment program must provide information on a variety of skills by specifying the degree to which a teacher is competent in each. The assessment system must provide information of this kind about the trainee at each stage of his or her development as each trainee progresses through the training program.

Because teaching performance assessment is undeveloped, we made the development of assessment strategies and procedures an integral part of our projected program of research and development for specifying and validating teaching skills. The reason for linking these two aspects of teaching performance--one, the behavioral definition of the skill and demonstration of its utility, and the other, the procedure for measuring the level of skill acquired--is that the two aspects are intimately related. The process of defining and describing in behavioral terms the nature of the teaching performance is part and parcel of the process of developing an assessment procedure. An assessment procedure cannot be developed without a clear description of a skill, and testing the relationship of the skill to pupil learning cannot be studied unless one has the procedures for evaluating teacher performance and student performance.

The first program of the proposed National Commission, therefore, has two major and interrelated goals. One, to develop a taxonomy of teaching performance whose elements have been demonstrated to affect student learning significantly; and two, the development of reliable and valid measures of these teaching performances. It is worth repeating that unless a research and development program is initiated which attacks these two problems, the performance-based teacher education movement is not likely to have much impact on teacher education programs.

The Art of Designing Instructional Systems in Performance-Based Teacher Education Programs

Since teacher educators spend most of their professional time in the training of teachers, one would think that the faculties of colleges and universities would have little difficulty in adapting their knowledge in the service of developing performance-based programs. Realistically, however, we must face the fact that most teacher educators are not instructional psychologists; that they teach much as they have been taught themselves; that the range of teaching methodologies used in training programs is limited largely to lectures and discussion. The objectives of the courses in these programs are frequently vaguely defined and often specify what one ought to know about teaching rather than what one has to learn to teach effectively. The methods of assessment are typically measures of knowledge about teaching and are rarely well-designed measurement procedures. Many teacher educators are more interested in the substance of what they are teaching about than in the science and art of inculcating learning in their students. Unfortunately, teacher educators are not noticeably different from other university and college professors in their approach to instruction.

But a performance-based teacher education program is built on such principles as: (1) clear specification of what is to be learned; (2) testing modules of instruction for whether they produce the acquisition of the specific objectives; (3) assessment procedures specifically related to the objectives of instruction. In other words, the design and construction of a sound performance-based teacher education program require the skills of an instructional engineer.

In making a change from traditional programs to this new type of program, the teacher educator faces several problems. First, the new type of program requires a total redesign of the teacher education program. The designer faces problems of time and resources to bring about such a total redesign. Moreover, he usually lacks the resources to test efficiently the effectiveness of his training modules. Further, he faces the uncertainities that have been described above of what constitutes competence and how it may be measured.

Practically, the development of performance-based teacher education programs seems to be a cottage industry. Developers scattered throughout the country work with scant funds and in almost total isolation from each other to develop instructional systems and the instructional modules which they comprise. It is true that a few schools have developed fairly comprehensive programs--Weber State College, Western Washington, the University of Houston, the University of Toledo, and Southwestern Minnesota. But even in these cases relatively small numbers of students are involved in the programs or the programs have just been initiated and their effects are yet unknown.

In a few places a most discouraging practice is occurring. Traditional courses are simply being repackaged as instructional modules. In such cases, it is dubious whether these programs are performance-based.

There is a genuine need for tested instructional systems significant for teaching because of their reference to a proven body of data. We decided, therefore, that a program of research and development was essential to create effective instructional modules and, subsequently, effective instructional systems, but that such a program should start only after some solid achievement in validating competencies and developing procedures to measure them.

Our plan is to begin within the first year a program to describe, test, and measure teaching skills; and in the second year to begin another program for developing and testing instructional modules designed to train for the validated skills. The Commission's structure is designed to give great flexibility in initiating programs at times when it becomes obvious that such programs should be initiated. We expect, therefore, to begin work on the design of instructional systems as quickly as possible. The start of such work will depend upon the progress made in our first program.

The Management of Performance-Based Teacher Education Programs

We were told repeatedly that creating performance-based programs created unique administrative problems. The grading of students, for example, in performance-based programs is entirely different from that in traditional programs.

The question of how to manage the grading system in a performance-based education program is representative of a number of administrative problems. Each of these problems arises because the organization of instruction will change in some significant way and the old methods of monitoring and cost-accounting the system will no longer be useful. Further, administrators of these programs have difficulty anticipating the problems that are likely to arise in the new organizational system which mediates the performance-based program.

On the other hand, those who have already worked on performance-based programs have acquired considerable experience in solving the problems of managing them. But like much of the knowledge of the administration of higher education, the ideas garnered from these experiences reside largely in the heads of the developers and managers.

We decided, therefore, that the third major program of the National Commission should be to assemble those experienced in managing these programs, have them analyze the management problems to be solved, and train others beginning new programs in the required skills.

A related problem is how states will manage certification processes as these programs become established. The Multi-State Consortium is working on this question. We expect to work closely with the Consortium and use its expertise to build management systems.

Research and Development and Educational Reform

The preceding sections have sketched the problems that many months of observation, analyses, and discussion revealed to be critical, leading us to conclude that the performance-based movement would become another educational fad if they were not first solved.

It may be useful to consider briefly the difference between what we shall propose as a research and development program to be sponsored by the National Commission and the educational reform movement of the past fifteen years--the history of curriculum reform in the '60s is a relevant example. The curriculum reform movement should have succeeded far better than it did, because it did not have to face some of the problems that the performance-based teacher education movement must face. The curriculum reform movement, for example, had relatively little difficulty in persuading people of the worthiness of its goals. Large numbers of professionals were readily assembled to construct curricular materials. There were attempts to evaluate the curricular reforms on a national scale. Yet these changes in educational programs, despite all the support and resources of money and talent, have done comparatively little to improve the quality of education.

One of the reasons is that the reformers identified only part of the problem. They thought that refurbishing, upgrading, modernizing the substance of the curriculum was sufficient to produce a radical improvement in the quality of education. They underestimated the need for changing the way that teachers taught. There was only a miniscule amount of research on effective teaching methods and on effective ways of training teachers to teach the new curricula.

There are two conclusions to be drawn from the experience. Educational quality will not improve without substantially affecting how teachers teach, and it is not sufficient to have good intentions or ideas if they are largely untested in practice. The performance-based teacher education movement is similarly characterized by excellent intentions and ideas, but it too will not succeed in reforming teacher education unless it faces up to its most serious challenges--what competencies are teachers to acquire, how shall we know that they have acquired them, and what are the most effective ways for instructing teachers so that they may acquire those competencies? Thus we must create a program of research and development that puts our ideas to the ultimate empirical test.

In the early days of our discussions we considered some obvious functions that a national organization might perform. For example, communication among those developing performance-based teacher programs is essential and is likely to promote the development of such programs. However, we decided that the Commission as such would not undertake building an information exchange as its major program. We had two reasons for relegating the interchange of information to a secondary role. We thought that exchanging untested ideas had relatively little value. Initially such exchanges might help promote concepts and practice, but eventually a moment of truth arrives for all practical educational programs--do they produce what they claim they will produce?

Our second reason was practical. There were other organizations that could better perform this function. They had already well-established communication channels and were regularly looked to for information and advice. We decided to support and seek to fund the development of the communication capacities of one or more of these organizations.

The more we studied what exists in the field, considered this new reform movement in the light of our experience of the past fifteen years, looked at the practical problems of developing performance-based programs, examined the materials that people were using, studied the specific kinds of competencies for which the training programs were being created, the more convinced we became that, unless the performance-based education movement were undergirded by a research and development program, it would founder.

Our problem became how we could persuade our colleagues and the public that unless such an effort is undertaken the promise of performance-based education is unlikely to be realized. How do we convince others that we are not advocating research and development simply because it is "good," but because it is necessary. Practically, how do we create a program that does not create the impression that eventually, after long research, we might come up with a well-validated program of performance-based education? How do we make our program a genuine combination of developmental activity and solid research so that progress is being continually made, so that programs are being created which are rooted in research that tests the validity of their conceptions and their methods?

The solution to this problem is critical to both the acceptance of the idea of the Commission and the achievement of its goal. If the Commission were seen only as a funding agency to generate support for a variety of diverse projects, it might be appealing to those who want such a mechanism to generate support for their own activity. But it would contribute nothing to the development of a solidly founded movement. Furthermore, we have had fifteen years of experience with a variety of funding mechanisms, and if one conclusion is unequivocal, it is that the support of the individual educational researcher has relatively little payoff for practical change in education. If the program of research and development seems unduly protracted, it will be honored as necessary but considered largely irrelevant. We would again hear the "doers" saying that performance-based teacher education is too important to wait for the results of research.

We have therefore set goals for ourselves of creating a sophisticated and practical program of research and development. We have proposed programs that are targeted to specific goals. We have set time limits for the accomplishments of these goals. We have looked at the possible course of evolution of our program over a five-year period. We shall specify priorities for accomplishment so that the program might be both integrated and evolutionary. We shall create mechanisms for keeping in touch with the practical application of research in programs and for using what was being created in programs as a basis for further research. We are careful to distinguish between formative research and summative research, so that we may promote the former to help develop programs while anticipating the necessity of the latter as programs become fully developed.

THE PROMISE OF A NATIONAL COMMISSION ON PERFORMANCE-BASED TEACHER EDUCATION

The need for a National Commission is rooted in the fact that the performance-based teacher education movement is sprawling, diverse, and uncoordinated, working under the most difficult circumstances. Those involved express their need for national leadership.

But what is there to begin with? First, there is a corps of practitioners spread throughout the United States who are totally committed to the concepts and principles already described. They have expended considerable energy and effort in elucidating the concept of performance-based teacher education and in persuading their colleagues that teacher education must move in this direction. Further, these same persons have set about creating the kinds of programs they have advocated. Although these programs are not numerous in proportion to the large numbers of students being trained as teachers, they are a good beginning. Only one who appreciates how different the performance-base education program is from the traditional program can appreciate the significance of, for example, the creation of the Weber State program; or the importance of institutions like Southwestern Minnesota and the University of Toledo, and, soon, Florida International, turning their entire programs to performance-based ones; or the meaning of a program such as that in Western Washington where the activities must be coordinated with the desires and approval of groups other than teacher educators. There has been significant achievement. There are thus cadres to support the performance-based teacher education movement and to count on as a nucleus for its fruitful development.

In the light of the foregoing analysis of problems in developing a performance-based teacher education movement, this optimistic statement may appear self-contradictory. The reader might be helped, however, in resolving the apparent contradiction by recalling that the authors of this report are themselves deeply involved in the movement and have spent countless hours consulting with those committed to developing and promoting it. The criticism, insight into problems, concern about what needs to be done, come from professionals who know and are involved in the performance-based teacher education movement. These are the preoccupations and criticisms of those who have come far, but who know how much further they must go to make a genuine reform movement.

Another reason to be optimistic about the possibilities of a National Commission is the kinds of activities occurring in states as they consider how to shift certification systems to performance-based standards. It is difficult to state precisely at this moment what and whether significant changes in the requirements for certification have actually been made. Several states are far along in designing new certification systems. Such states as Texas, Florida, and New York have master plans or administrative directives that specify how and when teacher education programs must be shifted to a performance-base. Other states, such as California, have enacted legislation which will require a shift to performance-based teacher training. However, in some instances, legislation has not yet been backed by either the resources to stimulate the change or by widespread acknowledgement of the reality that change must come.

States such as Illinois have task forces that have developed programs and plans for shifting to performance-based certification procedures.

New Jersey has set up task forces to develop performance-based criteria for certification. Washington is almost three years into a program for developing new certification standards. Among the states most active in promoting changes in certification are Connecticut and New York in the Northeast, Florida in the Southeast, Texas and Arizona in the Southwest, Michigan and Illinois in the Midwest, and Washington and California in the Far West. We expect such states as Ohio, Oregon, and Georgia to translate their planning into action within the next year.

Several agencies of the Federal government have invested substantial sums in the development of programs of teacher education which are performance-based and in projects which will contribute to the development of such programs. Teacher Corps, for example, has changed its programs to performance-based ones. The Model Elementary Education Programs project has had a substantial influence on the conceptualization of programs. The Training of Teachers of Teachers projects stimulated many reforms and promoted a spirit of innovation. The Multi-State Consortium, the Protocols Project, the Southern Consortium, and the Texas Teaching Centers are major projects underway which will stimulate the growth of performance-based teacher education.

Thus, there are people and programs, ideas and projects, and commitments and desires to make reform in teacher education a reality. The proposed National Commission will supply the missing ingredients in these diverse activities, and will give the movment thrust and a substantive base.

In the following section we provide the details of the proposed Commission's structure and program. The plan of the Commission provides for its evolution as its influence and achievement grow. Its beginning will be relatively modest; its promise and potential are great.

Part II

The Design for a National Commission
Structure
Management
Programs

In the preceding section we argued the case for a center of national leadership for the performance-based teacher education movement. In this section we describe the characteristics of a National Commission and its programs.

The Commission, we propose, will be an independent, non-profit organization. During its first year, the Commission will operate under the aegis of ETS, using the resources of that organization to provide support services which it would otherwise have to provide itself. By the end of the second year, however, the Commission's operations will expand to the point where it will be practical to incorporate the Commission as a separate, self-sustaining entity. The proposed organizational structure has been designed to accommodate and stimulate this growth.

Representativeness of the constituencies and interests in performance-based teacher education will be achieved by composing a Board of Trustees, a Coordinating Committee which will serve as the executive committee of the Commission, and Task Forces to develop and carry out programs. The Task Forces will also insure flexibility so that the Commission can solve new problems as they arise; they will also provide for increasingly widespread participation in the Commission's activities.

THE ORGANIZATIONAL STRUCTURE OF THE COMMISSION

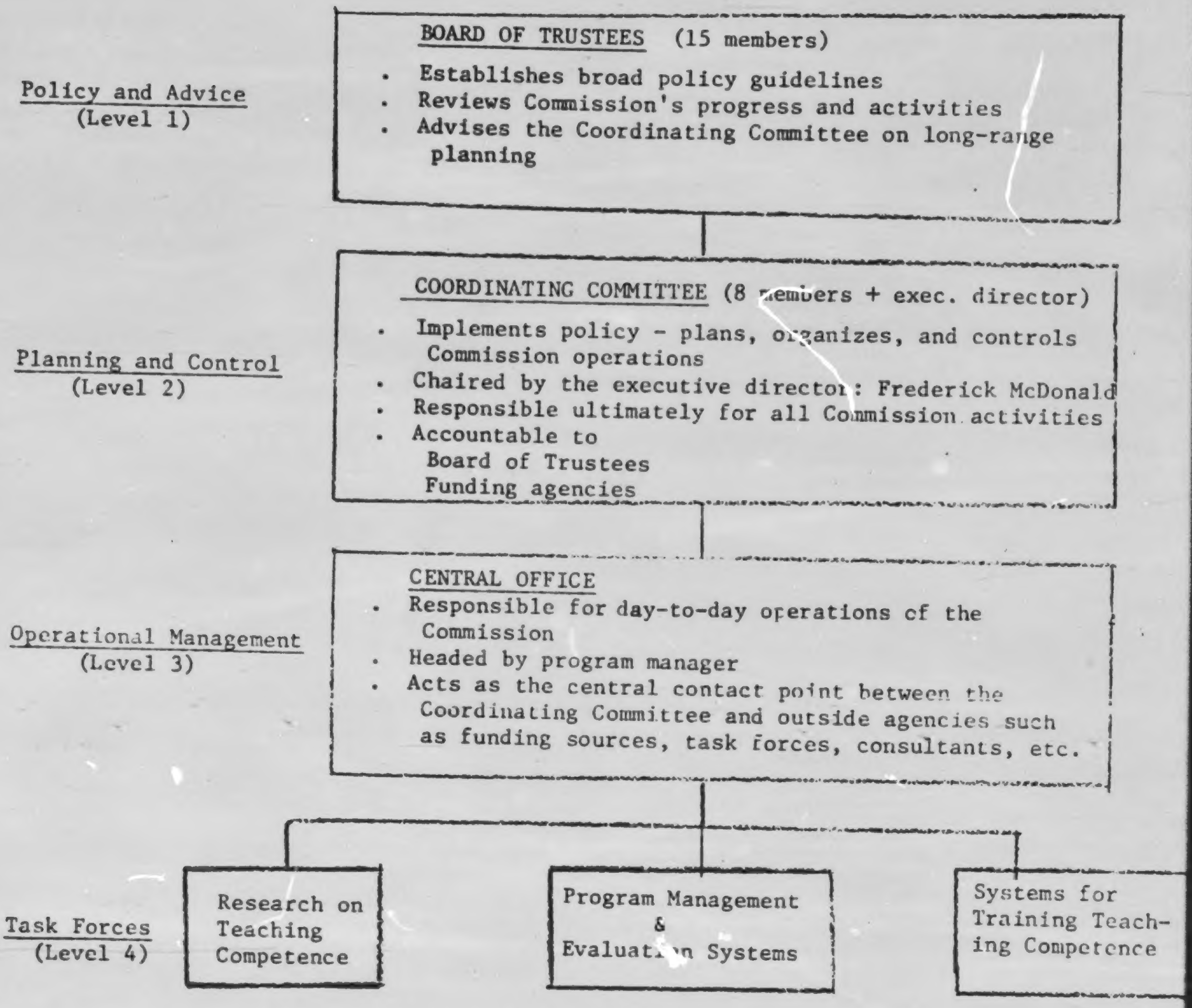
The structure of the National Commission will have four levels. Figure 1 portrays the organizational structure of the Commission. The top level is the Board of Trustees, which will be responsible for setting policy, reviewing the progress and activities of the Commission, and advising the Coordinating Committee on long-range planning.

The second level will be the Coordinating Committee, chaired by an executive director, and having ultimate responsibility for all Commission activities. The Coordinating Committee will plan, organize, and monitor all of the Commission's operations and programs. It will be accountable to both the Board of Trustees and funding agencies, and will be responsible for policy implementation.

Management of the day-to-day operations of the Commission will be the responsibility of the third level, the central office. This office, under the supervision of a program manager, will act as the liaison between the Coordinating Committee and outside agencies such as funding sources, task forces, consultants, institutions, and persons engaged in the Commission's programs. It will be the administrative arm of the Coordinating Committee, performing such basic functions as monitoring project funds and expenditures, preparing budgets for proposals, monitoring the task forces and projects' progress, maintaining Commission records, and carrying on all other activities necessary to support the Commission.

The National Commission's research and development projects and assessment activities will be carried out at the fourth level of the organization. The programs of the Commission will be conducted through task forces that will be groups of persons or organizations that conduct specific research and development activities. Three permanent task forces will conduct the major work of the Commission in the foreseeable future; others will be added as needed. Later in this section we shall describe the specific activities of the task forces. Each has been set up to solve current major problems of performance-based teacher education.

Figure 1: The Organizational Structure of the National Commission



Policy and Advice
(Level 1)

BOARD OF TRUSTEES (15 members)

- Establishes broad policy guidelines
- Reviews Commission's progress and activities
- Advises the Coordinating Committee on long-range planning

Planning and Control
(Level 2)

COORDINATING COMMITTEE (8 members + exec. director)

- Implements policy - plans, organizes, and controls Commission operations
- Chaired by the executive director: Frederick McDonald
- Responsible ultimately for all Commission activities
- Accountable to
  Board of Trustees
  Funding agencies

Operational Management
(Level 3)

CENTRAL OFFICE

- Responsible for day-to-day operations of the Commission
- Headed by program manager
- Acts as the central contact point between the Coordinating Committee and outside agencies such as funding sources, task forces, consultants, etc.

Task Forces
(Level 4)

Research on Teaching Competence

Program Management & Evaluation Systems

Systems for Training Teaching Competence

The Board of Trustees of the National Commission

The credibility and impact of the National Commission will depend on its success in involving all of the diverse groups that have an interest in and an effect upon American education. The composition of the Board of Trustees will reflect this concern; members will hold prominent positions in education, business, government and national affairs, and other professions. Final selection of the members of the Board will be made as soon as the Commission is established. The following names are representative of the kinds of persons who will be invited to join the Board of Trustees:

Publishing

1. Mr. Fred M. Hechinger
   Editorial Board
   New York Times

2. Mr. Norman Cousins
   Editor: *World*
   Formerly Editor of the
   Saturday Review

3. Mr. Hedley Donovan
   Publisher
   Time Magazine

Business & Finance

1. Mr. David Packard
   Hewlett-Packard Inc.

2. Mr. Rudy Peterson
   Chairmen of Board
   Bank of America (Retired)

Professional Organizations

1. Dr. Edward Pomeroy
   Executive Director AACTE

Education

1. Dr. Michael Scriven
   Professor of Philosophy
   University of California

2. Dr. David Krathwohl, Dean
   School of Education
   Syracuse University

3. Dr. E. Nyquist
   Commissioner of Education
   State of New York

4. Dr. John Porter
   Superintendent of Public Instruction
   Michigan

Foundations

1. Dr. H. Thomas James
   President, The Spencer Foundation

2. Dr. Edward Meade
   Ford Foundation

3. Dr. Wayne Holtzman, President
   Hogg Foundation

Federal Government

1. Dr. Donald Davies
   Deputy Commissioner USOE

2. Mr. David Selden
   President AFT

3. President or representative, NEA

4. Dr. Harold Webb
   Executive Director
   National School Boards Association

5. Representative of American Bar
   Association

6. Representative of American
   Medical Association

2. The Honorable Edith Green
   Member of U.S.
   House of Representatives

3. The Honorable John Brademas
   Member of U.S.
   House of Representatives

Coordinating Committee

The single element most crucial to the development of the Commission will be the Coordinating Committee. This group will be directly responsible for project planning, allocation of resources, and solicitation of resources. It will plan, organize, monitor and control the Commission's operations. It is, therefore, essential that this group be composed of persons who have demonstrated professional competence relevant to performance-based education; are dedicated to the performance-based education movement: and have demonstrated their ability to work together as members of a highly professional team.

We propose that the individuals who have conducted the study leading to this report serve as the Coordinating Committee. Others may be added if the need for additional expertise arises. Commitments to continue as members of the Coordinating Committee have already been received from: Dr. Frederick J. McDonald, Educational Testing Service; Dr. Horace Aubertine, Illinois State University; Mr. Theodore Andrews, New York State Department of Education: Dr. Howard Coron, New York University: Dr. Robert Houston, University of Houston; Dr. Karl Massanari, AACTE; Dr. David Potter, Educational Testing Service; and Dr. Allen Schmieder, United States Office of Education.

Central Office

The Central Staff must be administratively efficient. We saw no need to create a large staff. We chose therefore to place administration under a program manager who would have a small support staff. The Central Staff can be expanded as the scope of the National Commission's activities expands.

The selection of a highly qualified person as program manager is essential to successfully coordinating and maintaining the daily operations of the Commission. The description of the qualifications and responsibilities of the program manager are in Appendix D.

Task Forces

The staffing of the projects and activities in Level 4 of the Commission's organizational structure will be determined by the requirements of each program which the Commission undertakes. However, in order to maintain close working relationships with the Coordinating Committee, members of the Coordinating Committee will act as chairmen of the task-force projects established during the first year of operation. For example, the proposed task-force project on Instructional Models will be chaired by Dr. Robert Houston. The proposed task-force project on the Management Training Institute will be chaired by Dr. Horace Aubertine.

The permanent Task Forces are these: 1) the Task Force on Research on Teaching Competence; 2) the Task Force on Program Management and Evaluation Systems; 3) the Task Force on Systems for Training Teaching Competence. Each is obviously directed to solving the basic problems we described in Part I.

Specific programs have been developed for two of the Task Forces: the Task Force on Research on Teaching Competence, whose program has been projected over a five-year period; and the Task Force on Program Management and Evaluation Systems. A specific program for the Task Force on Systems for Training Teaching Competence will be developed in the Commission's first year because its work will be dependent on the achievements of the Task Force on Research on Teaching Competence.

A major characteristic of the work of these groups is that their programs are interdependent. The program of the Task Force on Research on Teaching Competence has specific goals to achieve each year, and what is learned in reaching these goals shapes the work to be undertaken in the other two Task Forces. Their accomplishments in turn shape the program of the Task Force on Research on Teaching Competence.

Our purposes in designing each program are to create specific goals to accomplish on a realistic but precise time schedule, engage the most competent persons in the country to carry out a program and include them in the planning of the specifics, ensure that each program is likely to have consequences for other programs, and find ways to get the results of these programs applied as quickly as possible.

Budget for The National Commission Activities: 1973

The following budget is the estimated expenses for the National Commission's operations for the first year, at three levels. Level 4, the task-force projects, is to be financed through separate proposals for funding and is not considered as part of the fixed costs of the National Commission.

Only the first-year's budget has been developed for the National Commission. These costs, however, will remain relatively fixed in successive years except for normal increases. We have attempted to keep the administration of the Commission lean. The administrative work is mainly planning and monitoring. It should also be kept in mind that the members of the Coordinating Committee including the executive director will be involved more than appears in this budget because they will be working as chairmen of Task Forces and directors of specific projects. The costs for this work will be absorbed into the funds for specific projects.

As the work of the Commission expands there will be corresponding increases in time for some personnel categories. We have, however, estimated time and cost requirements for work to be done, and expect to justify future budgets in terms of accomplishments and next steps.

THE MAJOR PROGRAMS OF THE COMMISSION

The preceding pages describe the formal organization of the National Commission on Performance-Based Education. What is the Commission going to do that requires this structure?

Research on the kinds of teaching performances which significantly affect student performance **is** the most critical need. Three kinds of activities are needed. A taxonomy of teaching performances must be developed. Assessment procedures and strategies for measuring competence in these performances must be developed. The research which demonstrates the relation of these performances to pupil performance must be undertaken. We established a program to meet these needs under the direction of the Task Force on Research on Teaching Competence.

We established a second program to solve a problem which we were told repeatedly was a critical one. Deans and program directors said they were having substantial difficulties in managing performance-based programs. These difficulties arise from two characteristics of such programs. The programs typically are "modularized." This framework eliminates the traditional course-credit structure in which instruction is organized. Moreover, students in these programs are evaluated in terms of achievement of specified kinds and levels of competence. This characteristic eliminates traditional grading procedures. The problems of institutions are compounded at the state level where a system is needed for evaluating, recording, and disseminating descriptions of teaching competence achieved by teacher trainees seeking state certification. Our second program was established to conduct research and development on these problems. This program is the responsibility of the Task Force on Program Management and Evaluation Systems.

A specific project was developed for each of these programs and plans for successive years were outlined.

The Models of Instruction Project

One of the two highest priorities for a first year project set by the Coordinating Committee is to initiate a project to select and test five instructional models that have applicability to the design and operation of programs of performance-based education. The choice of this project by the Committee was based on the following grounds:

- There is a need for the profession to become more scientific in the specification and refinement of instructional models which will be the basis for the training models of performance-based teacher education.
- There is a lack of empirically tested theories of instruction to serve this purpose.
- The selection and testing of the models of instruction will facilitate the development of a Taxonomy of Teaching Competencies, contributing to the evolution of viable theories of instruction and strategies for the assessment of teaching competence.

In the first phase of the project five models of instruction will be subjected to testing. These models were selected from those described by Professor Bruce Joyce of Teachers College, Columbia University.[1] His descriptions are based on a careful study of educational, psychological and sociological literature, and study of institutional styles. The five models selected are the instructional models for:

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[1] Joyce, Bruce & Weil, Marsha, Models of Teaching, Prentice Hall, Inc. Englewood Cliffs, New Jersey, 1972, 398 pp.

1. Concept Learning
2. Contingency Management
3. Inquiry Training
4. Awareness Training
5. Creativity Training

Objectives of the Project:

The several specific objectives of the project are these:

1. Draft, test and revise the specifications of the five Models of Instruction.
2. Draw and test implications of each instructional model for teacher training.
3. Analyze the five models of instruction for common characteristics, attributes and goals, and distinguish the salient aspects unique to each model.

To accomplish these objectives, the following steps will be taken:

1. Specify the kinds of behavior change expected of pupils when each model is the basis of instruction.
2. Identify the teaching competence necessary to facilitate these changes in students.
3. Investigate through research the relations between these specifications of teaching performance and pupil learning.
4. Conceptualize the training systems for the teaching competencies.
5. Develop the procedures for assessing teaching competence.
6. Organize the teaching competencies into a taxonomy of teaching performances.

In order to accomplish the above objectives a plan spanning five years of research and development has been prepared. During the first and succeeding years, the results of the projects's efforts will provide additional insight and direction in formulating plans for succeeding aspects of the project. Appendix E contains a list of the operational objectives for each of the five years, a Gantt chart schedule for the project, and a budget.

A Training Program for Managers of Performance-Based Teacher Education Programs

For the performance-based educational movement to make an appreciable impact, the National Commission must devote a share of resources to developing and testing strategies for implementation of performance-based programs. Many potentially worthwhile innovative educational programs come to grief because their developers lack expertise in translating a blueprint for action into a functioning system.

One of the causes of difficulties and failures is the inadequate attention paid to such factors as:

1. formative evaluation of system components
2. pilot testing of a prototype program
3. interests and abilities of training personnel
4. development of back-up systems
5. development of capacity to modify program during its operation
6. design and operation of the decision-making system
7. involvement of broad segments of available personnel in program development and assessment

Educational managers are not trained to think in terms of the design and operations of a system, a task they must be able to master to install innovative programs. Also they are not habituated to looking for the kinds of problems implied in the list of factors above, in part because these problems have been resolved in the programs they now manage. PBTE programs need managers who have the skills of systems analysis.

The Nature and Scope of Educational Management

Educational management must be concerned with four basic questions:

1. What are the intended outcomes of the programs? (objectives)
2. How are the intended outcomes going to be realized? (program)
3. How will it be determined whether the program is functioning as intended? (formative evaluation)
4. How will it be determined whether the intended outcomes of the program have been realized? (summative evaluation)

These questions are focal points for many activities. The educational manager must, therefore, initiate a variety of processes which fall into three categories and which keep attention focussed on these questions. First, processes must be developed to define, clarify, and specify purposes, and to reach consensus on their relative significance. Processes must be initiated to design and test the training system, to stage its implementation, and to redesign it when the purposes of the program or its components are not being achieved satisfactorily. Lastly, the manager must insure that the effects of the program's components as well as its products are evaluated. The manager must also organize these processes so that they interrelate to each other meaningfully.

Currently in many performance-based teacher education programs there is a discernible lack of formative evaluative procedures, a lack which tends to reduce their flexibility and adaptability. It is important to avoid fossilizing an innovative program at the drawing-board stage or in the first form of its operation. Too often programs are abandoned or modified in the direction of the traditional program because the trainers are not prepared to learn from mistakes or to properly identify them or to redesign when objectives are not being met satisfactorily.

The day-to-day operations of a PBTE program need monitoring more than do traditional programs. We learned of one program that failed because it could not keep students on schedule and could not lead them through the system, so that they knew what was expected of them at each step. The students portrayed their plight graphically in the student newspaper by a cartoon showing a student surrounded by question marks and arrows pointing in all directions.

The importance of developing, planning, and monitoring systems to handle these problems is apparent when one considers the complexity of the performance-based model. Recall that students proceed through instructional modules at different times. The system usually requires considerable technology. The trainers and managers get information about students' performance in a variety of ways and must evaluate its credibility, relevance, and significance. There must be provisions for handling various kinds of breakdowns in the system. Obviously a system is needed to plan schedules and to monitor their operation, to assign personnel efficiently, and to detect problems as they occur.

While these systems are essential to the successful operation of a program, a most critical element is the necessity for pilot testing of the prototype before full-scale implementation occurs. Adequate planning can help minimize the problems a new program will have, but it cannot anticipate every problem. Pilot testing provides an even greater opportunity for program designers to ferret out and to correct hidden problems, thus enhancing the probability of a successful implementation.

Among the ordinary problems that may be identified in a pilot test are discrepancies between stated objectives and training procedures, insufficient or inadequate facilities and technology, incapacity to provide students with evaluations of their performances, and conflicting schedules of supervision. Each pilot test also turns up problems that are not usually anticipated, arising from the personalities of the individuals involved, the culture of the school, its rules and policies, the expectations of students and their teachers, and the difficulties of adopting new habits to get onself to different places at different times. If all of these problems are not quickly identified and resolved before a program is put into operation, it is likely to founder, never to be revived.

Another factor that is critical in the management process of program implementation is the inclusion of all relevant personnel, whenever possible, in the decision-making process. Commitment to a program can be generated if a conscientious effort is made to provide a broad base of participation and open communication among the involved persons. Some of the current performance-based teacher education programs have been planned without involving the teachers who will serve as supervisors of student teachers in their practical work. The lack of such participation creates doubts about the likely success of new programs. Experience has shown that teacher educators must establish their credibility through genuine involvement of and work with teachers in program design and testing.

Moreover, the desire for "parity" in deciding who enters the profession, expressed by teachers through their organizational representatives, is growing, and cannot be ignored by collegiate personnel. It is reasonable to assume that new teacher education programs will have to be developed within a shared working relationship among teachers, college faculty, and state department personnel if the implementation of new PBTE programs is going to have a chance to succeed.

Training Institutes for Program Managers

In order to develop a cadre of skilled PBE program managers a series of five training institutes is proposed, to be instituted over a five-year period.

The primary objective of the training institute will be to develop the following skills of each participant:

1. To plan and develop PBTE programs using a systems approach.
2. To develop strategies for implementation of programs.
3. To develop strategies and acquire the art of monitoring programs.
4. To develop problem-solving skills for coping with problems as they emerge in the operation of a program.
5. To develop formative and summative strategies for program evaluation.
6. To select and train personnel for designing and operating programs.
7. To design formative and summative evaluation strategies.
8. To develop a dissemination system.

The Institutes will be performance-based; that is, the instructional program will be organized around instructional models directed to acquire the specific competencies associated with the objectives described above. These modules will be designed by experienced program managers. Each participant will receive a profile of his or her skills derived from evaluations of their performance in the Institute. An advisory service will be available to former participants to help them with their problems in their home institutions. The effects of the Institutes will be evaluated by the Commission.

A five-year plan for the operation of these Institutes is presented in Appendix F.

Proposal for a National Information Clearinghouse on Performance-Based Education

The creation and operation of a national information clearinghouse are needed to support the research and development activities of the National Commission on PBE. If the Commission is to keep in touch with a national movement, it must know what is happening and where. If it is to help give direction to the movement, it must be in contact with educational institutions and agencies. Through the collection, processing, and dissemination of information about existing and emerging programs, experiments, pilot studies, and research activities, the Commission can keep in touch with the state of the movement and help to give it direction.

The reader will recall that we have said at several points in this report that the Commission would concentrate its efforts on the creation of a research and development plan, and that it would not be an information exchange as such. But such an exchange will be necessary. Therefore, we are proposing that the Commission seek funding for another agency to establish this exchange.

Functions of the Clearinghouse

1. Serve as an information storage and retrieval center.
2. Provide facilities for small on-the-spot research projects.
3. Provide educational displays and training packages for institutions, conferences, and workshops.

4. Develop and apply criteria for the collection and processing of information.
5. Develop and disseminate pertinent reports, bibliographies, and other related informational pieces.

It is expected that the Commission will draw on the resources and capabilities of other existing national agencies to perform this important task. It proposes to utilize the experience and capabilities of other agencies rather than duplicate activity that is already underway. For example, the American Association of Colleges for Teacher Education (AACTE) in Washington, D.C. and its affiliated ERIC Clearinghouse on Teacher Education have the kind of capability needed to support the research and development activities of the Commission. The AACTE, composed of nearly 900 colleges and universities, has an established communications network at the national level which could be utilized for the collection and dissemination of information about PBE. It is affiliated with and its offices are adjacent to the ERIC Clearinghouse on Teacher Education, which has extensive information storage and retrieval capacities. The ERIC Clearinghouse is part of a larger national network of such centers.

Currently engaged in a national project on performance-based teacher education, the AACTE is well acquainted with the movement and is exerting its influence to help give it appropriate direction. Its publication capabilities would further enhance this project. As part of its PBTE project, the AACTE has already set up an information clearinghouse, but it is operating on a "shoe-string" basis. As now operated, it would be inadequate to support the research and development activities proposed by the Commission. The plans and budget for this project are in Appendix G.

A Proposal for a National Survey and Assessment of Performance-Based Teacher Education

As we consulted with various persons about the state of the art in performance-based teacher education, it became apparent that it was difficult to obtain precise information about what was going on. Details about the specifics of programs, such as the number of students enrolled, the kinds of instructional modules being used, the evaluation strategies, faculty involved, and similar items were not available. A more important observation was that there was no information about the quality of materials and programs, though individuals did give us their impressions. It was this lack of detail that made us suspicious of claims about how much had been or was about to be achieved and which stimulated us to design the Commission's activities to solve research and development problems. Also, we were regularly turning up persons and programs that had little prominence but looked promising.

We propose that a national survey and assessment be conducted with two goals: (1) to find out what is being done and by whom; (2) to assess its worth. The first goal is directly related to the Commission's goal of involving persons and institutions committed to and actively engaged in performance-based education. While we think we have sufficient information in this respect to begin the work of the Commission, more precise information will be needed as the Commission's program develops. Further, this information can be fed into the National Clearinghouse to make it available to others.

Some type of assessment of available materials is badly needed. Such materials and programs ought to be evaluated in the ways we have advocated throughout this proposal. But it makes sense as a first step to use another form of evaluation to sort out the promising from the unpromising. A program of evaluation based on expert judgment used against clear criteria is a useful way of achieving this sorting out. There are precedents for this type of evaluation which have been successful; for example, the U. S. Office of Education's dissemination branch established such a program to evaluate the products of the Regional Laboratories and the R and D Centers. We propose to develop a similar type of program.

In general, the development of a comprehensive plan for national leadership and for research and development in PBE requires from the first as clear a picture as possible of the nature and promise of PBE and of program progress to date so that the following will occur:

1. The National Commission and its Task Forces will have an accurate perspective on the national situation.
2. Program priorities of the National Commission will relate as closely as possible to the needs of current programs.
3. Program plans can be built as much as possible upon work already done so that "wheels will not be rediscovered."
4. Program plans can as much as possible strengthen current efforts by linking them more effectively and helping them to relate to a national strategy for program development.
5. There will be a higher degree of "sharing" and a greater economy of development.
6. There will be an identification of current centers of action, of key resources and materials.
7. There will be developed a firm basis from which to communicate to the public the essential characteristics and promise of PBE.

The specific activities to be carried out in this survey and assessment are described in Appendix H. Each activity is described in terms of what is to be done and who is to do it; a projected upper limit on cost is also given.

The National Commission will seek funding for these activities and develop a master plan for carrying them out and integrating them into the work of the Commission.

Other Projects

The Commission is set up so that it can begin other projects as the need develops. One important line of activity will be developing plans to coordinate work with such groups as the Multi-State Consortium, the Southern Consortium, and similar groups. We know, for example, that working with the Multi-State Consortium will soon require our attention so that we can help institutions coordinate with the plans for the information systems being developed by this Consortium.

The Coordinating Committee will be responsible for initiating these relations and new projects growing out of them. We have requested in our budget a relatively small sum to facilitate the initial stages of development of such projects.

Conclusion

This section of our report has presented a plan for a National Commission on Performance-Based Education. The organizational structure is lean but has the capability of expanding if that seems desirable. It provides for the wide participation necessary to achieve consensus and commitment to the leadership of the Commission. It is designed to involve many persons in carrying out its programs. We therefore think we have created an organization with the characteristics our advisors said were necessary if the Commission were to be accepted as the leader of the national movement to performance-based teacher education.

Equally important is the character of the program of the Commission. There is no question that the Commission proposes to do what is not being done and what needs to be done if the movement is to achieve its goals. Its programs are concrete; they are not vague statements about desirable goals or flimsy outlines of what might be done. They have been tested on professionals who will use their products. We have obtained the cooperation of the persons who will participate in them. In short, the Commission is ready to go to work.

For these reasons, we are optimistic about what the Commission will accomplish, as are those who have reviewed our plans. Enthusiasm and commitment prevail among those willing to support the Commission. For once, the goal of reforming teacher education seems realistic.

APPENDICES FOR
A NATIONAL COMMISSION ON PERFORMANCE-BASED EDUCATION: ITS FEASIBILITY, PROPOSED ORGANIZATION, AND PROGRAM

Volume II

A Report to the Rockefeller Brothers Fund

Project Director
Frederick J. McDonald

Associate Project Director
Horace Aubertine

Coordinating Committee

Theodore Andrews
Howard Coron
James Deneen
Jack Hollister
Robert Houston
Karl Massanari
David Potter
Myrtle Rice
Allen Schmieder

Educational Testing Center
Princeton, New Jersey
December 1972

EDUCATIONAL TESTING SERVICE
PRINCETON, NEW JERSEY

TABLE OF CONTENTS

Volume II

Appendix A: Meetings with Outside Consultants 1

Appendix B: Vitae of Coordinating Committee 39

Appendix C: Activities of Coordinating Committee 72

Appendix D: Program Manager Position Description 91

Appendix E: Model Development Proposal 94

Appendix F: A Program of Training Institutes for Managers of Performance-Based Teacher Education Programs 108

Appendix G: Plans for a National Information Clearinghouse on Performance-Based Education 115

Appendix H: A Program for a National Survey and Analysis of Current PBE Programs and Resources 119

Appendix A

Meetings with Outside Consultants

Section I

Planning Meeting, February 16, 1972, Atlantic City, N.J.

Participants

Agenda

Summary

Meeting to Discuss Problems
Related to forming a
Consortium of States Interested in Teacher Certification Based on Performance

Time: 10:00 a.m. - 4:00 p.m. February 16, 1972 (Wednesday)

Place: Chalfonte-Haddon Hall Hotel, Atlantic City, New Jersey

Acceptances

Dr. Theodore Andrews Associate in Teacher Education State Department of Education 22 Washington Avenue Albany, New York 12210	518-474-6440
Dr. Robert F. Carbone, Dean College of Education University of Maryland College Park, Maryland 20742	301-454-2011
Dr. James B. Conant (President Emeritus, Harvard University) 200 East 66th Street New York, New York 10021	212-832-7042
Dr. David Darland, Editor Journal of Teacher Education National Education Association 1201 Sixteenth Street, N.W. Washington, D.C. 20036	202-833-4187
Dr. Don Davies Deputy Commissioner Office of Education 400 Maryland Avenue Washington, D.C. 20202	202-963-7693
Mr. Fred M. Hechinger Education Editor The New York Times 229 West 43rd Street New York, New York 10036	212-556-1234

Dr. Carl Marburger Commissioner of Education Department of Education 225 West State Street Trenton, New Jersey 08625	609-292-4450
Mr. Edward J. Meade, Jr. Program Officer in Charge Public Education The Ford Foundation 320 East 43rd Street New York, New York 10017	212-573-5000
Mr. Russell A. Phillips, Jr. Rockefeller Brothers Fund 30 Rockefeller Plaza New York, New York 10020	202-247-8135
Dr. Edward C. Pomeroy Executive Director American Association of Colleges for Teacher Education One Dupont Circle, N.W. Washington, D.C. 20036	202-293-2450
Dr. Benjamin Rosner, Dean School of Education City University of New York 1411 Broadway, 11th floor New York, New York 10018	212-239-7430

From Educational Testing Service

Horace Aubertine - Coordinator of Teacher Education
John S. Hollister - Executive Associate to the President
Frederick J. McDonald - Chairman, Teacher Behavior Research Group
Myrtle Rice - Administrative Assistant to Mr. McDonald
William W. Turnbull - President

AGENDA

February 16, 1972

Atlantic City, New Jersey

Meeting to Discuss Consortium of States on Performance Certification of Teachers

The purpose of this meeting is to discuss with you and to receive your advice on the preliminary plans that we have made for the organization of a consortium. We have assumed that the role that the potential members of the consortium will expect us (ETS) to play is that of coordinator of the activities of the organization. We assume that they will want us to propose ideas about how the consortium may be organized. Therefore, we have sketched out what we think is a workable organization and which we will propose to its potential members. We are asking you to critize the concept and the specific tasks outlined for the various components of the organization. As you review the plans will you please prepare your comments around the following items:

1) What do you think of the concept of the organization proposed? The Council of Superintendents is designed as a major element because the superintendents' leadership in each state is necessary for the success of the consortium. Other committees proposed represent groups who are important for the development of the consortium.

2) What do you think of the composition and role of the Coordinating Committee? This committee is the working committee which will coordinate and integrate the plans of the other groups and will draw up the final report on the consortium's work.

3) What do you think of the tasks assigned to each of the council and committees? We tried to select tasks that needed to be done and that could best be done by the committees to which they are allotted.

In responding to these questions it might be helpful to remember that the goal of the first phase of the consortium is to develop plans that will be coordinated among the states for carrying out the eventual construction of a performance based certification system. It is also the purpose of this phase of the consortium's work to identify people who will be committed to the project over a five to ten year period and who can make commitments for themselves and their institutions to do the work of the consortium. Following is a list of specific questions about the tasks assigned to the various groups which we wish to discuss with you:

1. In what ways do you think the superintendents can facilitate state acceptance of the consortium?

2. What might be the two or three major problems a superintendent would encounter in getting state participation in the consortium?

3. What might be some alternatives available to a superintendent to solve these problems?

4. In what ways can a superintendent enlist support for the consortium among the business leaders and interested citizens in the state? What are some of the pitfalls likely to be encountered in working with business leaders and interested citizens?

5. How might a superintendent approach institutions of higher education within a state to obtain their support and participation in a consortium?

6. How can the consortium facilitate the Performance Based Certification Movement within a state?

7. What citizens' groups might be interested and concerned with supporting and publicizing the goals of the consortium? How might such support be obtained? What problems do you foresee in involving these groups?

8. Should business leaders become involved in the task of obtaining financial support for the consortium? If so, to what extent? And in what ways?

9. Should funding be sought on a yearly basis or a long term basis?

10. Do funds raised within a state remain within that state, or are they shared among the states?

11. Should citizens' groups lobby for funds from state and federal governments, or should lobbying be left to some other group?

12. What are the potential sources of friction and conflict between state teacher certification officers (and boards) and the state superintendents' teacher education institutions, and teachers' organizations?

13. What would prohibit or inhibit state certification officers from working together as a committee?

14. What might be the two or three major problems a dean would encounter in gaining institutional support for participation in the consortium?

15. Should the issue of reciprocity of certification standards be raised at this time with the state superintendents? If so, in what way?

16. What kinds of problems may arise in gaining the approval and support of the governing bodies of the participating colleges and universities?

17. Should the deans request funds from their own institutions for the support of their developing programs. If so, to what extent?

18. What problems should we anticipate with the teachers' organizations

These questions occurred to us as we thought about three problems; 1) how do we secure the participation and cooperation of each of the individuals and groups whose assistance the consortium needs if it is to succeed; 2) how do we create widespread interest so that the consortium is the focal point of a movement; 3) since future developments will depend on funding, what should we be doing now that will lead to securing that funding?

Other questions and problems will occur to you as you read this proposal. We are hoping that you will raise these questions and point out the problems.

We will revise this proposal or completely rework it after we meet with you. Our next proposed step after that will be to invite the superintendents to Princeton in March to discuss the idea and plan of the consortium. After that we propose calling meetings of the various advisory committees.

Preliminary Planning Meeting For
The Rockefeller Brothers Consortium of States:
An Outline of Major Points

Educational Testing Service
Princeton, N.J.
February 1972

MORNING SESSION

I. Introductory Material - ETS - Fred McDonald:

A. Plan for formation of a Consortium--proposed general structure:

1. Advisory Council
2. Consortium Coordinating Committee
3. Council of State Superintendents
4. Special Advisory Committees (working committees):
    a. Deans and Teacher Education Directors
    b. State Certification Officers
    c. Citizen & Business Leader Groups
    d. Teacher's Organizations

B. Major questions to be answered:

1. What kind of organization should we attempt to create?
2. Who should be involved?
3. What kinds of things should they do?

C. Central Issue: The development of basic materials of instruction and assessment-evaluation in the area of teacher performance.

II. General Discussion - Major Points:

A. Organizational Purposes

1. Marshal funds for research and development in field
2. Create mechanism for mutual stimulation and result sharing.
    a. Several states and colleges have initiated programs independently.
    b. NEA Conference on topic
3. Identify useful common measures for teacher performance and pool knowledge.
    a. For assessment of teacher performance
    b. For development of instructional materials (possible opposition noted)

B. General Organizational Problems

1. In setting up organization (over next ten months):
    a. Need to work on establishing coherent basis before getting public involved
    b. Need to get people who represent significant constituencies, not just themselves

2. Problem that professional organization as such might introduce a political element not entirely beneficial for the project--thus might be better to have teacher representation independently of professional organization.
3. Don't want organization to take on too much.
4. Describing the Consortium project as a "movement" with national goals might engender opposition--might be better to have individual state organizations; ETS could then suggest what seemed to be valuable directions, without the stigma of a national organization "imposing" directions.

C. Council of State Superintendents

1. Problems of authority of state superintendents in committing states. (Might be able to commit state teacher's colleges, but not other colleges--though state teacher's colleges can't survive indefinitely ignoring standards of certification agencies.)
2. Resentment of performance criteria imposed from the top
3. To make efforts useful, need cooperation of relevant professional advisors
4. Superintendents are variable in quality and political power.
5. Superintendents are overworked--not much time to apply to this project.

D. Problem of Definition and Reference of "Performance" and "Competency"

1. What are criteria of performance-evaluation to be based on?
    a. Teacher performance
    b. Student performance
    c. Some interrelationship of the two

2. How would agreement on this be achieved or standardized between states?
3. Is it desirable to achieve agreement?--or is necessity mainly just to begin coordinated action?
4. Should be developmental process rather than pre-defined issue.
    a. out of initial applications
    b. out of initial research

5. Defined on basis of output or input?
6. Problems of how "levels" of performance are to be defined--(perhaps by people in the specific professions?)

E. Necessity of having performance-based evaluation for all levels of teaching (not just at certification level--certification too weak).

F. Perhaps include other groups--for both positive and negative reasons (negative - to avoid vetos).

1. Professional (such as MLA, national Math organization, etc.)
2. School administrators
3. Other groups (at whatever level) which have already started smaller programs of this kind.

AFTERNOON SESSION

On-going projects in performance-based education

I. First Report - Al Schmieder

A. Other national-level organizations concerned with same set of problems

1. AACTE
2. Teacher Centers - Leadership Training Centers (had general group define major problems; then appointed specialists to work on solutions)
3. Models Group - two kinds of experience:
    a. Consortium as resource pool
    b. Their own separate plans
4. Teacher Corps
5. State Consortium ("Title Five")
6. Office of Education educational renewal efforts - coordinating money for more local impact

B. Publications in the field

1. The Power of Competency-Based Teacher Education (to be published by Allyn Bacon)
2. R. Houston (ed.): Problems, Prospects and Progress (to be published by SRA)
3. "Proceedings of the Teachers' Conference" in Education Today (April '72 issue)
4. Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers
5. Other bibliographies (including one put out by Task-Force '72)

II. Second Report - Ben Rosner - Task-Force '72

A. Task Question: What are the various mixes that can be recognized and give some form to the following five elements (at various stages of development or funded in prior years)?

1. Protocol materials
2. Training

3. Concept of performance-based teacher education or teacher certification
4. Elementary models
5. Training complex

B. Identified key problem for competency-based teacher education as the measurement problem.

C. Recommendations

1. Fund a group to begin the systematic task of devising operational measures of various competencies.
2. Fund the development of instructional materials.
3. Found a "training-lab" or "teaching center" to house instructional materials for organization of certification process (leading hopefully to eventual separation of training and certifying agencies).
4. Consider new approaches to encourage teachers to augment present skills - (a number of specific recommendations were made).

D. Other projects

1. Identified six criterion levels in teacher education
2. Prepared models for state and regional operations of developing competency-based modes of education. (example: model established some effects of population density)

III. Third Report - Jim Steffensen - Teacher Corps

A. Present Developmental Orientations

1. Oriented now toward buying competency rather than just putting young interns in schools
2. Trying to join together a research effort (models) with an operational program
3. Looking at teacher corps as part of competency-based movement--the developmental part (as opposed to operational) in four areas:
    a. Training
    b. Development
    c. Technical assistance
    d. Forward planning

B. Present Developmental Projects

1. Model development
    a. Bank in Houston - competency-based programs and models by specialists
    b. University of Wisconsin: What are the smallest units (something larger than a course) which can stand alone independent of the rest of the teacher education program?

2. Teacher Corps Associates Program - Trying to enlarge pool of expertise in people who can offer assistance and development in performance-based programs.

IV. Fourth Report - Karl Massanari - Committee on performance-based education program

A. Broad base of participation and diversified viewpoints gives slow but careful advancement
B. Has representation from:

    1. Association of Classroom teachers
    2. American Association of Teachers
    3. College and University sectors
    4. Researchers
    5. General professional organizations
    6. State departments of education
    7. Minority groups
    8. Students
    9. School administrators - one to be added soon

C. Has liaison officers and groups
D. Expansion is to include:

    1. Southern Consortium
    2. Ben Rosner's Outhouse group
    3. Model directors
    4. Ted Andrews' new multi-state consortium
    5. Rockefeller Brothers Consortium of States group (future)

E. Committee's prior work

    1. 1 1/2 years
    2. Started with inservice education on performance-based methods
    3. Prepared on site case studies to get and articulate facts
    4. Prepared preliminary bibliography
    5. Commissioned papers

        a. state of the art paper - PBTE in historical perspective, indicating its promises, potential, and problems (eg. assessment)
        b. working papers from Weber State, University of Washington at Seattle
        c. Houston, Utah (institutional) and Ted Andrews (state) papers on assessment--others to be added

    6. Soft spot search--current paper topics

        a. PBTE and humanism in teacher education
        b. Implications when decision-making base is broadened.
        c. Thoughts from the office of education
        d. Management problem

F. Noted lack of national support - proposing six regional conferences (with teacher corps) on dissemination and performance-based methods.

V. Fifth Report - Ted Andrews - New York State Department

- A. Support for multi-state Consortium on PBTE assured
- B. To begin in April ('72) with following states:

    1. Washington
    2. Oregon
    3. Arizona
    4. Utah
    5. Minnesota
    6. Texas
    7. Vermont
    8. New York
    9. Florida

- C. Each state will establish a management system for development and use of P.B. approach to T.E. and T.C.--where "management system" is defined as a detailed description of the logical steps needed to move an idea from its initial conception to its full implementation.
- D. Focus questions

    1. What has been done?
    2. What needs to be done?

- E. Future projects

    1. Possibly publish newsletter as liaison effort
    2. Planning summer work shops (assessment, teacher corps, etc.)

CLOSING REMARKS

I. Have a number of institutions, centers, and individuals interested and ready to move on these performance-based programs.

II. We need:

- A. Definitions - before going to the public
- B. Development of an acceptable "package deal"--i.e., shouldn't attempt to evaluate people separately from program evaluations.
- C. A committment orientation - to avoid piecemeal trial and error approach.
- D. Clear understanding and statement of the proposed consortium's mission

    1. Should it pull all related interests together to make desirable changes (may be difficult due to size and diversity) or...
    2. Should we first give the Consortium a focus with a key element such as the development of a measurement apparatus for PBTE and PBTC? (Problems may arise here too, however, if we view performance-based programs as involving assessment, specification of objectives, management capabilities, and instructional systems and yet focus the consortium's efforts on only one or two of these.)

III. Continue planning efforts at next meeting in Princeton, N.J. on March 14th and 15th, 1972.

Section II

First General Meeting, March 14 & 15, 1972, Princeton, N.J.

Participants

Agenda

Summary

PARTICIPANTS

CONSORTIUM OF STATES

1. Mr. Wendall C. Allen
   Assistant Superintendent of
   Teacher Education and Certification
   Board of Education
   Olympia, Washington 98501
   206: 753-6738

2. Dr. Theodore Andrews
   Associate in Teacher Education
   N. Y. State Department of Education
   22 Washington Avenue
   Albany, New York 12210
   518: 474-6440

3. Dr. Horace Aubertine
   Coordinator of Teacher Education
   Room 301, Schroeder Hall
   College of Education
   Illinois State University
   Normal, Illinois 61761
   309: 438-2103

4. Dr. Willard Bear
   Director of Accreditation and Certification
   Oregon Board of Education
   942 Lancaster Drive, NE
   Salem, Oregon 97310
   503: 378-3569

5. Mr. Vito C. Bianco
   Assistant Superintendent
   Department of Professional Relations and Services
   212 East Monroe Street
   Springfield, Illinois 62706
   217: 525-3774

6. Dr. Caseel D. Burke
   Dean
   School of Education
   Weber State College
   Ogden, Utah 84400

7. Dr. Howard Coron
Director of Student Teaching
New York University
School of Education
Washington Square
New York, New York 10003
212: 598-2866

8. Mr. James Deneen
Director
Teacher Examinations, General Programs
Educational Testing Service
Princeton, New Jersey 08540
609: 921-9000

9. Dr. Edward Ducharme
Assistant Director
New England Program in Teacher Education
Rhode Island College
Mt. Pleasant Avenue
Providence, Rhode Island 02908

10. Dr. Lionel Duncan
Department of Education
Morgan State College
Hillen Road & Cold Spring Lane
Baltimore, Maryland
301: 323-2270

11. Dr. Joseph Durham
Dean
School of Education
Howard University
Washington, D. C. 20000
202: 636-7340

12. Mrs. E. L. Evans
Member on Committee for Teacher Preparation and Licensing
1020 Street
Sacramento, California 95814

13. Mr. George Gustafson
Executive Secretary
Commission for Teacher Preparation and Licensing
1020 Street
Sacramento, California 95814
916: 445-0228

14. Mr. James Hartgraves
Deputy Superintendent
Department of Education
Suite 165, State Capitol
Phoenix, Arizona 85007
602: 271-4272

15. Dr. Henry J. Hermanowicz
Dean
College of Education
University of Illinois
Normal, Illinois 61761
309: 438-2103

16. Dr. Richard H. Hersh
Chairman
Secondary Education
University of Toledo
Toledo, Ohio
419: 531-5711

17. Dr. Herbert Hite
Dean
Western Washington State College
Bellingham, Washington 98225
206: 676-3000

18. Mr. John Hollister
Executive Associate
Office of the President
Educational Testing Service
Princeton, New Jersey 08540
609: 921-9000

19. Dr. Robert Houston
Bureau of Educational Research
College of Education
University of Houston
Houston, Texas 77004
713: 748-6600

20. Dr. Robert Howsam
Bureau of Educational Research
College of Education
University of Houston
Houston, Texas 77004
713: 748-6600

21. [illegible]r. Lorrin Kennamear
[illegible]ean
College of Education
University of Texas
Austin, Texas 78712

22. Mr. Richard Lacey
The Ford Foundation
320 East 43rd Street
New York, New York 10017
212: 573-5000

23. Mr. Richard Majetic
Program Director
National Teacher Examinations
General Programs
Educational Testing Service
Princeton, New Jersey 08540
609: 921-9000

24. Dr. Karl Massanari
Associate Director
American Association of Colleges of Teacher Education
One Dupont Circle
Washington, D. C. 20036
202: 293-2450

25. Dr. Frederick J. McDonald
Director
Educational Studies
Educational Testing Service
Princeton, New Jersey 08540
609: 921-9000

26. Mr. Richard McNair
Commission for Teacher Preparation and Licensing
1020 Street
Sacramento, California 95814
916: 445-0228

27. Mr. Edward J. Meade, Jr.
Program Officer in Charge
Public Education
The Ford Foundation
320 East 43rd Street
New York, New York 10017
212: 573-5000

28. Dr. Jonathan Messerli
Dean
Hofstra University of Education
Hempstead, Long Island, New York 11550
516: 560-0500

29. Mr. Charles W. Nix
Associate Commissioner for Planning
Higher Education Agency
201 East 11th Street
Austin, Texas 78701

30. Dr. Edward Pomeroy
Executive Director
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, N.W.
Washington, D. C. 20036
202: 293-2450

31. Dr. David Potter
500 Princeton-Kingston Road
Princeton, New Jersey 08540
609: 924-4770

32. Dr. Thomas J. Quirk
Research Psychologist
Teacher Behavior
Educational Studies
Educational Testing Service
Princeton, New Jersey 08540
609: 921-9000

33. Dr. Ben Rosner
Dean
City University of New York
1411 Broadway, 11th Floor
New York, New York 10018
212: 239-7430

34. Dr. Gilbert Shearron
Chairman
Division of Elementary Education
College of Education
University of Georgia
Suite 47
Aderhold Hall
Athens, Georgia
404: 542-4244

35. Dr. Ward Sinclair
Director of College Curriculum for Teacher Education
Department of Education
225 West State Street
Trenton, New Jersey 08625
609: 292-4477

36. Dr. G. Wesley Sowards
Dean
School of Education
Florida International University
Tamiami Trail
Miami, Florida 33144

37. Dr. James P. Steffenson
Chief of Program Development Branch
Room 2089, C Teacher CORPS
400 Maryland Avenue, S. W.
Washington, D. C. 20202
202: 962-7981

38. Dr. Tom T. Walker
Director
Division of Teacher Education and Certification
Texas Education Agency
201 East 11th Street
Austin, Texas 78701
512: 475-2721

Plan for the Meeting

Purposes:

The general purposes of this meeting are twofold: 1) to identify the problems and needs of state departments, teacher training institutions, teachers' organizations, and research and development groups and organizations with respect to using teacher performance as a basis for certification and training; 2) to create a structure which will develop a plan for a consortium of these groups that will work together over the next five to ten years to solve these problems and to meet these needs.

The work of this meeting is discussing and planning. It will be the first in a series which will help to shape a proposal for the future development of the Consortium.

Specific Objectives:

1) Identify the priority needs and problems related to the development of performance-based programs of teacher education, the accreditation of these programs, and the certification of teachers on the basis of performance;

2) Achieve consensus among the different groups represented at the meetings on the priority needs and problems;

3) Recommend the categories of information to be surveyed to assess the current status of performance-based education and certification and plans for its development;

4) Identify alternative structures for the organization of the Consortium.

Meetings:

There are three kinds of meetings planned, general sessions and two kinds of small group work. The general sessions are to be used for presentations and open discussion among all the members.

The small groups for discussion are organized in two different ways. On Tuesday morning groups will be organized by institutions and roles. These groups will have common experiences and views. The purposes of these meetings is to have the different groups represented describe the needs and problems of performance-based education and certification and their priorities as they see them.

On Tuesday afternoon, the groups will be reorganized across institutional affiliations. The purpose of this afternoon's meeting is to achieve consensus on the priority needs and problems.

On Wednesday, we will meet again in mixed groups to discuss other problems of the Consortium.

Consortium of States for Performance-Based Teacher Education and Certification

First General Meeting

An Outline of Major Points

Educational Testing Service
Princeton, N. J.
March 14-15, 1972

I. Conceptualization of the System
  A. Definition and position
    1. Develop and standardize definitions of basic P.B.-System concepts and terms
    2. Develop position papers to give consistent and coherent theoretical strength to the groundwork of the Consortium
  B. Structure
    1. Grand Design
      a. Purpose of education - perhaps develop a position paper
      b. Development of present and future Consortium structure - (see #2. below)
      c. Educational governance system -
        i. The need exists and will surface with the rise of P.B.T.E.
        ii. The purpose would be to operationally interrelate the following elements:
          (a) State boards of education
          (b) Colleges and University
          (c) Local school districts
          (d) Professional organizations
        iii. The working-model construction might best be undertaken outside the Consortium - The Consortium could, however, stimulate this action.
        iv. The goals would be a definitive legislative policy statement and a related working model
    2. Structural organization of the initial Consortium
      a. Purpose of the Consortium -- (What are we attempting to do? -- Where should we place and/or allocate our emphasis?)
        i. Production?
        ii. Direction?
        iii. Delivery?
      b. Consortium identity -- (What are we?) Suggestions and questions
        i. Development group (as opposed to dissemination group)
        ii. Not a loose confederation
        iii. Include: planning group (or policy-formation group) that is representative, yet separate from advisory group
        iv. Small advisory group
        v. Larger group as idea source and/or sounding board
        vi. Involve special interest groups (e.g., State Department of Education, AACTE, etc.) through special assignments and Consortium planning projects
        vii. Establish satellite groups -
        viii. Select leaders with strength, concern, and time to lead.
        ix. Expand System to include more teacher association members and (local) NEA representatives
        x. Select or encourage teacher association members and/or NEA members to form a P.B. concern group similar to ours -- to do what we have done without our suggestions, with the goal of pooling ideas and perhaps drawing a new planning group from both working groups

c. Membership suggestions and criteria -- (Who are we? -- Who should we be?)
  i. General criteria
    (a) Committment from participating organizations to guarantee regular participation of selected members (who not only provide status but a solid contribution as well)
    (b) Limit participating organizations to those that can benefit
    (c) Aim prime participation at organizations that can benefit and contribute -- direct Consortium efforts toward (mutually) beneficial tasks and provide evidence of benefits to participating and/or desirable orgnaizations.
  ii. Representation concerns
    (a) How should social and environmental divisions effect representation? (Consider - geographical, city vs. rural, and minority group representation)
    (b) Membership suggestions include:
      (1) Observors (non-active members)
      (2) Administrator groups
      (3) Teacher groups
      (4) Speicalized groups (e.g., NCTM, NCTE, AAAS)
      (5) Those who control money
      (6) Those who control certification
      (7) Teacher educators
      (8) Discipline representatives
      (9) School representatives
      (10) Concerned citizen representatives
  iii. Specific criteria suggestions
    (a) State criteria -- (partial list)
      (1) Committment of personnel and time to Consortium or P.B.E.
      (2) State funds for P.B.E.
      (3) Evidence of state interest (e.g., literature, meetings, etc.)
    (b) Institutional criteria -- Such criteria are needed to avoid the inelegibility of interested institutions from uninterested states -- Criteria could involve proposal papers, effort expended, degree of committment, etc.

d. Initial Consortium goals -- questions and recommendations:
  i. In general the Consortium should:
    (a) Permit a more comprehensive P.B.T.E. and P.B.T.C. movement than possible by separate institutions or groups
    (b) Generate greater visibility, impact, and interest than probable via single institutions or groups
    (c) Enhance external funding possibilities
    (d) Share ideas, experiences, activities, results, and difficulties
    (e) Encourage and coordinate other group efforts

- ii. Establish:
  - (a) Standards on which to evaluate performance-based programs
  - (b) A grand design for a governance of teacher education
- iii. Define and fund initial tasks leading to P.B.T.E., for example:
  - (a) A task force to supply and/or increase knowledge of P.B.T.E. to future participants and the general public
  - (b) Task efforts to increase and display participant benefits
- iv. Consider:
  - (a) Preliminary planning meeting recommendations:
    - (1) Provide brainstorming sessions and writing time following these
    - (2) Perhaps have group chairmen meet for an additional day to write proposals and meeting summaries
  - (b) Objectives and projections for the future

3. System administration
   - a. Centralized -- ETS, Other?
   - b. Decentralized -?

     If yes,
     - i. To what degree?
     - ii. Which functions are best centralized and which best decentralized?

II. Operation of the System

- A. Methods and Information: Development and Exchange
  - 1. Communication -

    Gathering, storing, retrieving, and disseminating information
    - a. Strengthen and develop internal mechanisms and liaisons--
      - i. Consortium letters, reports, surveys
      - ii. Group meetings
      - iii. Develop intergroup (non-meeting) means of communication as operational superstructure unfolds
    - b. Develop external mechanisms and liaisons--
      - i. Consortium could function as a coordinator and distributor of information
      - ii. Consortium or sub-groups could gather data through existing organizations which would then be incorporated into the superstructure and/or create appropriately affiliated groups for such purposes.--For most kinds of data the former approach seems more reasonable
  - 2. Subject - Matter
    - a. Developmental experiments
    - b. Model testing--

      Develop mechanisms for testing the effectiveness of the system models carried into operation, and for further developing them
    - c. Development, testing, and dissemination of performance-based materials
  - 3. Resources
    - a. Recognize early production needs for effective Consortium
    - b. Focus disparate resources--What mechanisms exist or could be developed for the purpose of providing a useful focus or framework to aid in the use of current disparate resources or those that might develop?
    - c. Organize and use existing apparatus

i. Obvious cooperative contacts:
(a) AACTE
(b) ERIC
(c) NCATE
(d) N.Y. State - O.E.
ii. Survey proposal:
Dr. James Deneen (ETS--Director-Teacher Examinations) volunteered to circulate a questionnaire (to be used to survey U.S. Educational Institutions) to all Consortium members for their reactions (i.e., additions, objections, comments). The results of the survey will then be shared with the Consortium.
d. Review current "P.B." practices - no adequate descriptions of current teacher-education programs (traditional or P.B.T.E.) exist.
e. Allocate on need basis
B. Assessment and Evaluation
1. Mechanisms and methods of the System - (points of structure)
a. Define P.B.T.E. System components
b. Perhaps construct a communication or cybernetic model on definition base
c. Establish guidelines for assessing both component and model function and adaptability to change
d. Stimulate data-base work, model studies, cost analyses, and evaluation-feasibility studies
e. Create centralized mechanisms for adding needed experimental flexability or administrative focus as the system develops
2. Training methods, materials, and Products of P.B.T.E. - (points of content)
a. Identify and analyze present practices
b. Develop a P.B.T.E. parameter theory
c. Level-of-competence parameters to include (at least):
i. Teaching knowledge, performance, decisions, strategies
ii. Content knowledge
iii. Complex-learning outcomes
(a) Identify and analyze these, apparently as correlated with teaching decisions and/or strategies
(b) What complex-learning outcomes are the objective of P.B.T.E.? (Criteria descriptive rather than prescriptive)
d. Identify any universal criteria for competency
e. Identify criteria and/or performance standards which are unique to learning characteristics
f. Give initial and advanced competency demonstrations by students and teachers
g. Study and assess teaching expertise in different teacher education schools and colleges
h. Study and assess criteria of style of both teaching and learning
i. Study and assess performing teachers as decision-makers as well as technologists

C. Support
  1. Determining and gaining financial aid
  2. Winning acceptance
     Involve:
     a. Students
     b. Teachers
     c. Administrators (power base)
     d. Community
  3. Avoiding and alleviating opposition (offensively and defensively)
     a. Corrective strategies for existing and anticipated forms of opposition
        i. Responsible objections--suggested corrective strategies:
           (a) Have clear understanding of opposing position
           (b) Assess its importance
           (c) Communicate with those opposed
           (d) Attempt to achieve cooperation
        ii. Objections based on misunderstanding
           (a) Possible causes:
              (1) Complete or partial lack of information
              (2) Faulty information
           (b) Suggested corrective strategies:
              (1) Educational campaign--provide promotional, explanatory, and justificatory materials
              (2) Emphasize change concepts and their advantages
              (3) Adapt information and its presentation to individual groups and their needs
        iii. Blind objections--suggested corrective strategies:
           (a) Attempt to involve those in question
           (b) Help eliminate the sources of blindness (e.g., fear of change, status threat, fear of involvement, additional work load, etc.)
           (c) Use modes of confrontation judiciously
     b. Effective communication tactics
        i. Develop and maintain sensitivity to informational needs
        ii. Judiciously select and assign spokesmen to individual interest groups
        iii. Develop and maintain sensitive feedback mechanisms
        iv. Develop a system or functional model for effective utilization of feedback and adjustment of communication procedures
        v. Provide operational evidence-(through successful P.B.-systems in operation)
     c. Dissonance avoidance by problem anticipation
     d. Cooperation and communication with other consortia

D. Certification and Accreditation
  1. Establish relevant relationships between the P.B.-movement and the teaching profession and public school practices
  2. Work toward an integration of these related elements of teacher education

Section III

Second General Meeting, August 10, 11, 12, 1972, Princeton, N.J.

Participants

Outline for Task Forces

Paper Developed by Herbert Hite

Questions and Problems Developed by Allen Schmieder

National Commission on Performance-Based Teacher Education

August 10 - 12, 1972

Princeton, New Jersey

Dr. Hugh Baird
Green House
Brigham Young University
Provo, Utah 84601

Dr. Bruce Joyce
Teachers College
Columbia University
New York, New York 10027

Dr. Charles Reed
State Department of Education
1118 Miles Johnson Bldg.
Tallahassee, Florida

Dr. Herbert Hite
Western Washington State College
Bellingham, Washington 98225

Dr. Robert Peck
University of Texas
Education Annex 3.203
Austin, Texas 78712

Dr. Vere M. DeVault
Professor, C & I
University of Wisconsin
750 University Avenue
Madison, Wisconsin 53706

Dr. Gil Shearron
College of Education
University of Georgia
Athens, Georgia 30601

Dr. Allen Schmieder
U. S. Office of Education
7th and D Street, S.W., Room 3682
Washington, D.C. 20202

Dr. Norman Dodl
Florida State University
Tallahassee, Florida

Dr. Horace Aubertine
College of Education
Illinois State University
Normal, Illinois 61761

Dr. Howard Coron
New York University
School of Education
Washington Square
New York, New York 10003

Dr. Karl Massanari
AACTE
One Dupont Circle, Suite 610
Washigton, D.C. 20036

Dr. Theodore Andrews
N. Y. State Dept. of Education
99 Washington Ave.
Albany, New York 12210

Dr. Robert Houston
Bureau of Educational Research
College of Education
University of Houston
Houston, Texas 77004

Dr. Frederick J. McDonald (ETS)

Mr. Jim Deneen (ETS)

Dr. David Potter (ETS)

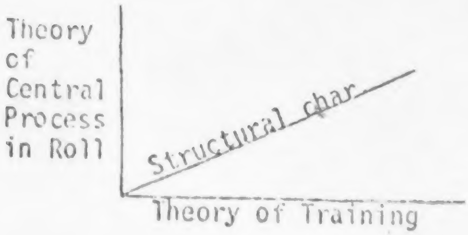
Mr. John Hollister (ETS)

Miss Puff Rice (ETS)

Dr. Judith Henderson
Professor of Education
Erickson Hall
Michigan State University
East Lansing, Michigan

MODELS TASK FORCES

1. Describe dimensions along which models may be differentiated.



2. Identify alternative potential models worth developing (ABTE)
    a. Give basic rationale of each
    b. Major distinguishing characteristics

3. Develop plan for developing models:
    a. Conceptualization
    b. System design
    c. Needed Research
    d. Cost of development plan.

TRAINING TASK FORCE

1. Describe dimensions along which Training Systems can be differentiated

2. Identify major training systems to be developed:
    a. Give basic rationale of each
    b. Major distinguishing characteristics
    c. Problems to be solved

3. Plan for Development
    a. Conceptualization
    b. System design
    c. Needed Research
    d. Cost of development plan.

Terminology

Assessment - The process of measuring an effect.

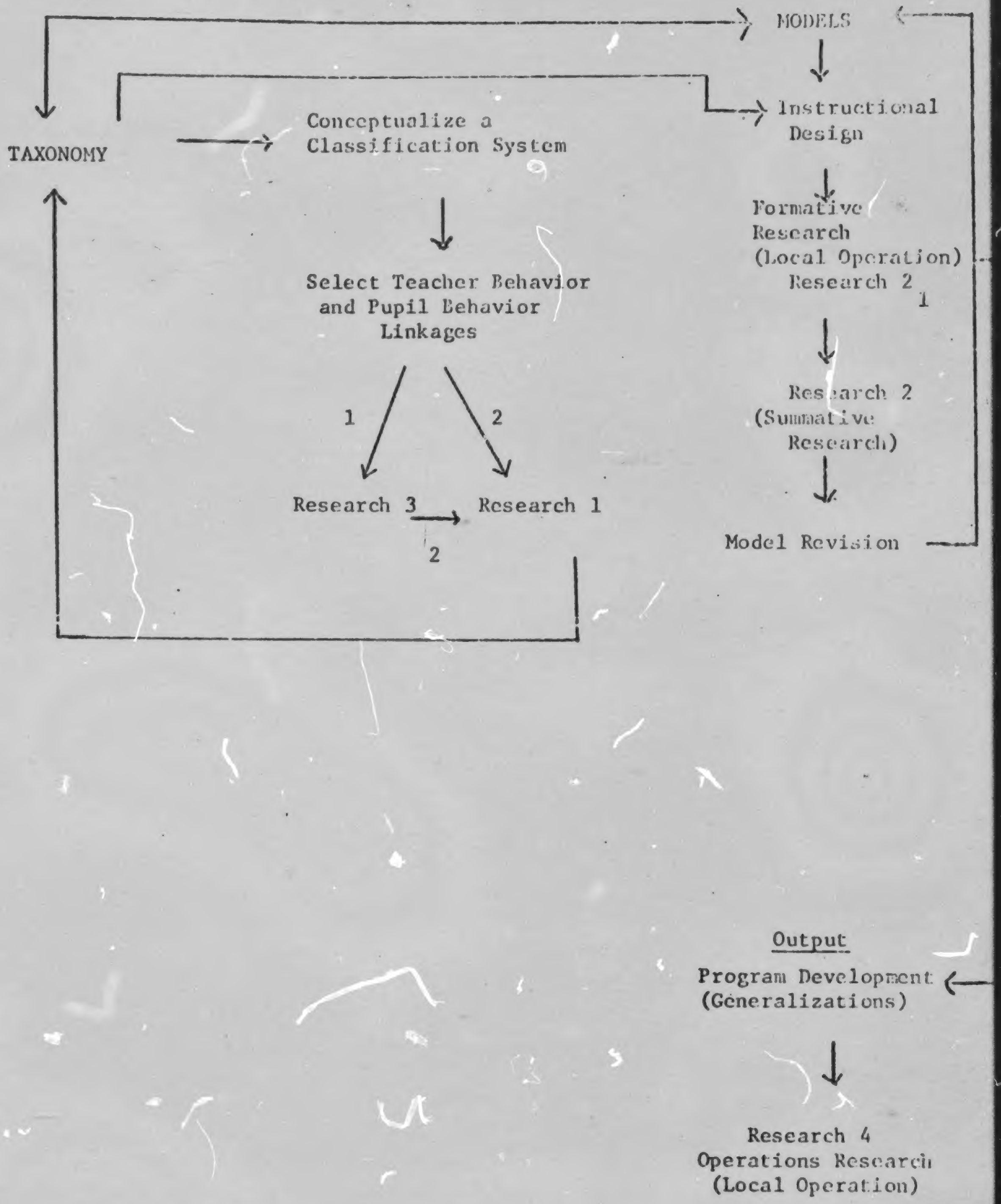
Evaluation - To judge an effect against a criterion.

Research 1: Hypothesis-testing research; e.g., relation between teacher behavior and pupil behavior.

Research 2: Decision-making research; e.g., ("Does this program produce the desired performances; (2) does this program produce the result more effectively than an alternative?)

Research 3: Assessment research; the process of developing the measurement techniques, their reliability and validity.

Research 4: Operation research
  (a) this model
  (b) operating program


MODELS
TAXONOMY
Conceptualize a Classification System
Instructional Design
Formative Research (Local Operation) Research 2
1
Select Teacher Behavior and Pupil Behavior Linkages
1
2
Research 2 (Summative Research)
Research 3
Research 1
2
Model Revision
Output
Program Development (Generalizations)
Research 4 Operations Research (Local Operation)

Paper Developed by Herbert Hite

OBJECTIVES

To extend CBTE to significant degree
To develop X operational CBTE programs
To prepare X T's by CBTE
To modify elementary-secondary education in cooperating schools whose teachers participate in CBTE
To define CBTE models and demonstrate their efficacy
To develop and test a TTT model of CBTE

PROPOSAL:

Define "non-negotiables" of CBTE
Identify X institutions with emerging CBTE programs--which are different from each other, but which exemplify the non-negotiables
Solicit other institutions associated with "schooling" types to develop pilot CBTE programs

--each will choose one of above (Inst.A.)

Inst. A will implement a process in which TT's at Inst. B will define their choices as to nature of components of their own CBTE pilot program
Inst. B. will contract to test their definition of CBTE with X students of teaching in period of time

--Cooperating schools and experienced T's will contract to define components relevant to their expertise--e.g., pupil traits

Goal of CBTE will be in terms of appropriate changes in elementary and secondary pupils

Feedback system

elementary-secondary pupil changes
↑ ↓
changes in performance of students of teaching
↑ ↓
changes in strategies of TT's (goal oriented)
↑ ↓
achievement of objectives of Inst. B's CBTE programs
↑ ↓
achievement of National Commission's goals--via Inst. A (implement CBTE program definitions in B Inst.)

PROPOSAL 2

Establish a continuous and free-floating seminar on CBTE research

Identify significant and persistent research problems associated with CBTE e.g., effects of specifying objectives upon behavior of T's and/or TT's

feasibility of identifying and evaluating teaching behavior

associated with complex learning objectives.

Identify researchable problems generated by development teams

Outline and assign to participants or research team

Disseminate to operational programs - field test and revise.

Questions and Problems Developed by Allen Schmieder

1. Levels of performance goals - determine levels and focus development on highest level
   Turner, etc. 6 criterion levels
   Joyce - 14 domains

2. How to demonstrate expected behavior in other than real situations--i.e. as in past, students will not always have access to real class--so protocols, micro-teaching, etc. will need to be used but are presently not necessarily performance based.

3. If PB is to hold student accountable for "essential tasks of teaching," what are they? what evidence do we have that they are essential: are some more essential than others?

4. What processes are best for determining key competencies to be demonstrated? What are built in systems for adjusting the key list regularly?

5. How do we really know when competencies have been mastered? What are levels of mastery? What reinforcements are needed? What growths can be expected after 1st level mastery, etc.?

6. What populations or mixes of populations should determine key competencies? Will it be different for skills and knowledge competencies? Or should the reservoir of competencies be made as large as possible to serve a vast range of knowledge-skill mixes--with complex systems of selection at the ready to develop and retrieve these mixes.

7. One of the major possible goals of the TP approach is a more personalized training program. What program strategies work best? How do we e.g. at MSO work thousands of students through X number of competencies? The logistics will be immensely complicated--what are research implications of individualizing programs at a time when people are abundant and dollars scarce.

8. What are the best kinds of modules? Who develops them? How "hard" should they be? What kinds of delivery systems are needed to maximize "sharing" of modules across regions and states? What are the problems of "sharing." Transfer (adaptation) etc. have been key issues since co-op research, yet little research on problem.

9. What evidence do we have anywhere that programs with exit requirements have worked--that proves that such prior qualifications are not necessarily needed?

10. What kinds of feedback systems are most effective? How do we train people to develop and use these systems?

11. What are some new and effective systems for field internships? What are implications for pupils of student teachers? (e.g. might they have even stronger levels of mischief than in days of lab schools.)

12. How can diverse groups most effectively work together? What will major problems be re consortia, e.g. over-lapping decision domains, etc.

13. Protocol and training materials being developed are for most part demonstrative/a small piece of the range of goodies needed. What are most crucial p & t materials? What is "adequate" range of p & t materials? Can p & t materials be developed "locally"?

14. What are best examples of "regenerative" systems?

15. Need to explore implications of a broader base of research, e.g. greater involvement of teachers.

    Implications of constantly adjusting to new situations i.e. if knowledge base and maybe even system change in several years, can't wait on traditional research cycle.

16. What are best systems for developing a professional from beginning to end? For linking pre and inservice? Research implications of same? What are major developmental questions for TP re pre-service? Re in-service?

17. What are best techniques for measuring relationships between teacher behaviors and student learning? How do you measure complex relationships e.g. deeper love of life, etc.?

18. What are implications of TP/and vice versa for other "major innovations" of last decade or so, e.g. protocols, mini-courses, programmed instruction, differentiated staffing, etc.

19. What are different problems in introducing concept to the great variety of unfamiliar constituencies-- e.g. problems of introducing, (let alone implementation) to community are quite different from problems of introducing to administrators and supervisors.

20. Lack of conceptual clarity.

21. Lack of common terminology.

22. How to best show it (TP) is not "anti-humanist".

23. Problems of specifying the "unspecifiable".

24. Lack of a comprehensive national strategy--how does R & D relate to whole? What should R & D priorities be?

25. How do you get maximum quality and keep minimum restraints when getting more and more specific?

26. Are competencies determined within perspective of today's world or to prepare for tomorrow's?

27. How to best deal with all those "external factors" that influence the process of learning a competency- e.g. environment, quality of materials, teacher-trainee, student's receptivity.

28. What are implications of major reform directions e.g. field centered teacher training, more technology, etc. for TP and vice versa.

29. Materials base shallow--theoretical range immense--how to set priorities

30. Do TP programs cost more or less than others?

Appendix B

Vitae of Coordinating Committee

VITA

Frederick J. McDonald

Present Position: Senior Research Psychologist; Director, Division of Educational Studies; Chairman Teacher Behavior Research Group, Educational Testing Service, Princeton, New Jersey.

Former Positions: Associate Dean for Instruction New York University, 1968-1970. Professor of Education and Psychology, Stanford University, 1956-1968; Director of Technical Skills of Teaching Program and Intern Data Bank Research; Director of Heuristic Teaching Program Stanford Center for Research and Development in Teaching, 1965-1968.

Member of Advisory Committee, University of Texas Research and Development Center in Teacher Education. Member of Advisory and Evaluation Committee for the Center for the Study of Social Organizations of Schools and the Learning Process: The Johns Hopkins University, Baltimore, Maryland, 1967-1968.

Education: Ph.D., 1956, Stanford University, Stanford, California.

Books:

Educational Psychology: Wadsworth Publishing Co., San Francisco, 1959, 721 pp. (Asian Edition, Overseas Publications, Ltd. Kaigai Suppan Boeki, KK. Tokyo, Japan) British Edition, Prentice-Hall International, Inc., London, England, 1961.

Educational Psychology: Second Edition, Wadsworth Publishing Co., Belmont, 1965.

Chapters in Books:

"Psychological Foundations of Education," Chapter 5 in *On Becoming an Educator*, V. Morris, (Ed.), New York, Houghton-Mifflin, 1963, pp. 120-168.

"The Relation of Learning Theory to Education: 1900-1950," in *Theories of Learning and Instruction*, E. R. Hilgard, (Ed.), 63rd Yearbook of the National Society for the Study of Education, Part 1, Chicago, University of Chicago Press, 1964, pp. 1-26.

"Heuristic Teaching" in *Research in Teacher Education*, B. O. Smith (Ed.), Prentice-Hall, 1970.

"Beyond the Schoolhouse" in The Schoolhouse in the City, A. T. Offler (Ed.), New York: Frederick A. Praeger, 1968.

Articles:

"An Investigation of Presentation, Response, and Correction Factors in Programmed Instruction" (with D. Allen), Journal of Educational Research, July 1962, 502-507, (55).

"Children's Judgments of Theft from Individual and Corporate Owners," Child Development, March, 1963, 34, 141-150.

"Meaningful Learning and Retention: Task and Method Variables," Review of Educational Research, 1964, 24, 530-544.

"The Influence of Social Reinforcement and the Behavior of Models in Shaping Children's Moral Judgments" (with A. Bandura), Journal of Abnormal and Social Psychology, September, 1963.

"Beyond the Schoolhouse," Urban Review, 3, 1968, 10-15.

Research Reports:

"Teaching Scientific Thinking at the High School Level" (with W. Shockley), U. S. Office of Education Project 2-090, August, 1964.

"Training Effects of Feedback and Modeling Procedures on Teaching Performance," U. S. Office of Education Project OE-6-10-078, 1967.

"Experimental Test of the Shockley Training Program," U. S. Office of Education, Project OE-6-10-026, 1967.

Recent Papers:

"A Theoretical Model of Teacher Training Variables," American Educational Research Association Convention, Los Angeles, California, 1969.

"Heuristic Teaching," American Educational Research Association, Minneapolis, Minnesota, 1970.

Major Research Grants:

Teaching Scientific Thinking at the High School Level (with W. Shockley and P. Hurd), U. S. Office of Education, 1964.

Teaching Scientific Thinking at the High School Level (with W. Shockley and P. Hurd), U. S. Office of Education, 1965-1967.

The Effects of Modeling and Feedback on the Acquisition of Teaching Behavior, U. S. Office of Education, 1964.

The Evaluation of an Experimental Curriculum in Nursing, NIH, 1964.

The Effects of Age and Practice upon Children's Conceptualization of Space, National Institute of Health, 1965-1966.

An Experimental Investigation of the Influence of Model Characteristics and Reinforcement Contingencies on the Imitative Behavior of Children, 1965, Proctor and Gamble Fund, Stanford School of Education.

Influence of Discriminative Context and Relative Effectiveness of Perceptual and Graphemic Representation in Second Language Learning, U. S. Office of Education, 1966.

Training Studies in the Learning of Teaching Behavior, Stanford Research and Development Center on Teaching, 1965.

Heuristic Teaching Research, Stanford Research and Development Center on Teaching, 1967.

The Development of a Teaching Anxiety Scale, Proctor and Gamble Fund, Stanford School of Education, 1966.

Influence of Level of Abstraction and Number of Examples on Complex Concept Learning, Proctor and Gamble Fund, Stanford School of Education, 1967.

The Development of Performance Measures of Teaching Behavior, Educational Testing Service, Princeton, New Jersey, 1970.

Professional Organizations:

Fellow and President-Elect, Division 15, American Psychological Association; American Educational Research Association; American Association for Advancement of Science; Sigma Xi; Phi Delta Kappan; Certified Psychologist with the State of California.

VITA

HORACE AUBERTINE

I. Current Position: Coordinator of Teacher Education - Illinois State University (1970)

Specialization: Social Studies Curriculum and Instruction

II. Educational Background:
A.B., University of California (Berkeley), 1950
M.A., University of California (Berkeley), 1952
M.A., Stanford University, 1954
Ed.D., Stanford University, 1964

III. A. Professional Experience:

1956-1960	Menlo-Atherton High School
1960-1961	San Carlos High School
1964-1966	Whitman College
1966-1967	Arizona State University
1967-1970	Colorado State University
SS, 1965	Pennsylvania State University
SS, 1966	Washington State College

B. Related Experience:

1956-1961	Social Studies Curriculum Committee member, Economics and U.S. History, Sequoia Union High School District
1966	Social Studies Curriculum Consultant, Walla Walla Public School District, Walla Walla, Washington
1966	Social Studies Curriculum Consultant, Richland, Washington
1967	Consultant for Media Project of A.A.C.T.E.
1968	Reader and Evaluator for social studies project proposals, Project Pace, Title III, U.S. Office of Education
1969-1970	Chairman, Social Sciences Undergraduate Curriculum Committee, Colorado State University
Current	Reader and Evaluator for project proposals to be submitted to U.S. Office of Education, State of Minnesota, State Department of Education

Current	Associate Project Director, National Commission on Performance Based Teacher Education and Certification (Frederick J. McDonald, Project Director), Planning Grant - Rockefeller Brothers Foundation - $69,000.00 (Released time from I.S.U. - ½ time - February to July, 1972)
Current	Consultant, Teacher Education Studies, Educational Testing Service, Princeton, New Jersey
Current	Institutional Coordinator of Peace Corps-Vista Programs at Illinois State University

IV. Funded Research:

1961-1964	Research Assistant, Stanford University, Secondary Teacher Education Project, funded by the Ford Foundation
SS, 1967	Research Associate, Teaching Skills Project, Research and Development Center for Teacher Education, Stanford University
1969	Field Research, Work with Cheyenne, Wyoming high school social studies teachers developing a program for including and developing social studies skills in the curriculum
1970-1972 Current	Project Director, U.S.O.E. Experimental Elementary Teacher Education Project for Social Science Majors ($75,000)
1971-1972 Current	Project Supervisor, Teacher Education Research Project, Educational Testing Service ($23,500)

V. Publications:

Aubertine, Horace. "The Use of Simulation-Games in Classroom Instruction", Paper presented at the National Association of Biology Teachers, Chicago, Illinois, October, 1971.

Aubertine, Horace, and Johnson, William D. "Teacher Performance Appraisal Scale", copyrighted, Spring, 1969.

Aubertine, Horace. Co-inventor, Educational Game in Geography "Destination", for use in junior and senior high school social studies classes, Spring, 1969.

Aubertine, Horace. "Rural Student Speaks Out", Phi Delta Kappan, June, 1969.

Aubertine, Horace. "New Tools for Educational Research and Teacher Training", Educational Television, March, 1969.

Aubertine, Horace. "The Use of Micro-Teaching in Training Supervising Teachers", The High School Journal, November, 1967.

Aubertine, Horace. "The Set Induction Process and Its Application in Teaching", The Journal of Educational Research, April, 1968.

Aubertine, Horace. "The Use of Micro-Teaching in the Process of Training Clinical Supervisors", Paper presented at Session 210 of A.E.R.A. Convention, February, 1967.

Accepted for Publication 1972-73: "The Renaissance of the Laboratory Schools" by The Journal of Teacher Education.

"Secondary Curriculum Design" by Education Technology, Fall, 1972: Special Issue on Competency-Based Education.

VI. Graduate Faculty Experience:

Chairman of doctoral committee for -
Robert Schuck, Ed.D., Arizona State University, 1967.

Chairman of Master of Education committee for -
Seng Seok Hoon, M.Ed., Colorado State University, 1969.
Mary Opoku, M.Ed., Colorado State University, 1969.
Constance Behr, M.Ed., Colorado State University, 1970.

VITA SHEET

Theodore E. Andrews

Academic Study

Little Falls High School, Little Falls, New York - 1950

Hartwick College, Oneonta - B.A. (History major, English minor) - 1954

State University of New York at Albany - M.A. - 1960

State University of New York at Albany - Candidate for Ph.D. degree in Foundations of Education (History). Topic accepted, research completed, writing underway.

Certified to teach secondary English and Social Studies

United States Army - 1954-56

Taught at Laurens Central School, Laurens, New York - 1956-58

Taught at Shaker High School, North Colonie School District, New York - 1958-

Assistant Professor, State University of New York at Albany (English Education) - 1962-66

Associate, Bureau of Teacher Education, New York State Education Department - 1966 to present

Considerable experience as a newspaper reporter (including a position with the Albany Times Union)

Date of birth - May 2, 1932

Married to former Katherine Coady

Two Children - Laura - four
Barbara - nine

Reside at: 8 Sevilla Drive
Elnora, New York

Telephone: AC 518 371-6583

Professional Publications and Activities:

"A Mandate for Action," *New York State Education*, November, 1967.

"Humanities Education in the Elementary School," *The Humanities Journal*, Fall, 1968.

"The Search for 'Better Folk,' " *New York State Education*, February, 1970.

"Preface," *The Assessment Revolution, National Symposium on Evaluation in Education*, Robert Berkhart, Moderator-Editor,; New York State Education Department, Division of Teacher Education and Certification--Buffalo State University College--Teacher Learning Center.

"Observer Comments," 1970 Annual Teacher Education Conference, Ellensburg, Washington

New Directions in Certification, Case Study, State of Washington, Office of Teacher Education and Certification--Funded by Improving State Leadership in Education, Denver, Colorado--Association of Teacher Educators Publication, 1971

Manchester Interview: Competency-Based Teacher Education/Certification, Performance-Based Teacher Education Project, American Association of Colleges for Teachers (February, 1972 publication).

"Competency-Based Certification," To be published in *Competency-Based Teacher Education: Progress, Problems, Process* by Science Research Associates, 1972.

In addition to the attached vita, I have posed the following questions (and answered them) as a slightly different approach to a vita presentation.

BRIEFLY WHAT EDUCATIONAL POSITIONS HAVE I HELD?

Laurens Central School, 1956-58 two years as a high school teacher of English and social studies, Laurens, New York.

Shaker High School, 1958-62, four years as a high school teacher of English in the North Colonie School District, a suburb of Albany, New York.

The State University of New York at Albany, 1962-66, four years as an Assistant Professor in English Education working with student teachers and teaching education courses.

The New York State Education Department, 1966-71, five years as an Associate in the Bureau of Teacher Education in Albany, New York.

WHAT ACADEMIC STUDY HAVE I COMPLETED?

Graduated from Little Falls High School in 1950, Little Falls, New York.

Graduated from Hartwick College in 1954, B.A. in history.

Graduated from the State University of New York at Albany in 1960, M.A. in Teaching.

Sixty hours of additional graduate work beyond the Master's degree.

Recognized candidate for Ph.D. degree, program in History of Education at the State University of New York at Albany, dissertati topic accepted, research completed, writing underway.

WHAT [illegible]EEN MY RESPONSIBILITIES IN THE NEW YORK STATE EDUCATION DEPARTMENT?

The Bureau of Teacher Education in which I am an Associate is responsible for approving teacher education programs in approximately 110 colleges and universities in New York State. We are legally charged with reviewing proposals for all programs for the preparation of teachers and for scheduling and coordinating onsite visits to the campuses, at least once every five years.

I have acted as chairman for approximately 30 college visits a year. In most cases these were team visits utilizing consultants both from within the Education Department and from outside educational institutions. It has been my responsibility not only to schedule and coordinate team activities but also to prepare the written report on the visit and make recommendations for official State action on the programs that were reviewed. Samples of such reports could be made available to you, if you wish to see them. I have also participated in numerous Middle States and NCATE evaluation visits.

In addition to the formal approval and registration responsibilities, I spend a great deal of time in informal consultation with the colleges that are preparing teachers. Approximately 40 such visits have taken place each year that I have been with the Department. These visits are shorter and often clearly designed to deal with only one particular problem, for example, how to establish a full-time student teaching experience within a liberal arts college.

Another ongoing activity has been appearing at professional meetings to present material to the field on positions that the Department has taken. For example, I have spoken in recent years at meetings of the New York State Association for Student Teachers, the New York State Council of Teachers of English, and the New York State Business Teachers Association.

WHAT OTHER PROFESSIONAL AND PERSONAL ACTIVITIES HAVE I ENGAGED IN?

I have been specializing for the past three years in developments in the field of certification by performance. Beginning with the responsibility for planning the National Symposium on Evaluation in 1968, I have often acted as the Department liaison at State and National meetings to discuss the feasibility of developing a performance basis for certification.

During my years as a public school teacher I was active in the New York State Teachers Association serving as a representative to the State house of delegates in 1957. In the past few years I have been most active in what is now the Association of Teacher Educators. I have been chosen as program director for the 1972 ATE National Workshop to be held at State University College at Fredonia, New York. The topic for this meeting is the Assessment of Performance and approximately 500 participants are expected.

In addition to my school teaching experience and my educational experience I, for many years, had a dual career as a newspaper reporter and I have written hundreds of articles in the varying daily and weekly newspapers for which I worked. Because of this I have been involved in other writing activities for the Department such as a report on the Returned Peace Corps Volunteer Conference published in 1967. Also while I was a member of the staff at the North Colonie School District, I was assigned the responsibility for public relations in that district. As a part of these responsibilities I attended all Board of Education meetings, scheduled press conferences when appropriate, edited a district newsletter that appeared three times a year, and prepared a 20 minute sound movie on a prospective bond issue.

Howard Coron

Present Position:

Associate Professor of Education, New York University
(Early Childhood and Elementary Education)

Director of Student Teaching - Elementary and Secondary

Director of Teaching Performance Center
(a video center for the analysis of teaching behavior)

Education:

B.A., Brooklyn College

M.A., Teacher's College, Columbia University

6th Year Diploma. Queen College (Supervision and Administratio

PhD., University of Wisconsin (Curriculum and Instruction

Professional Education:

1954 - 1964 Elementary School Teacher

1964 - 1968 Instructor and Supervisor, University of Wisconsi

Other Current Activities:

Chairman of the Policy Board of the NYU-Park East
High School N.Y.S. Trial Project - P.B.T.E. - English Educatio

Creator of P.B.T.E. guidelines for the Apprentice Teacher
program of the NYC Board of Education

AASCU-Sears Foundation member of advisory Board and Site
Visitor for planning projects in P.B.T.E.

Writer of several reports on teacher training programs for
N.Y.U., AACTE, and Board of Education, City of New York

Co-Chairman of WNET-Channel 13's Committee on Higher Educatio

PROFESSIONAL DATA

W. Robert Houston

Office

444 Education Bldg.
University of Houston
Houston, Texas 77004

Phone: (713) 749-3621

Home

9831 Vogue
Houston, Texas
77055

Phone: (713) 467-3088

Educational Experience

1970-Present University of Houston, Houston, Texas

Professor of Curriculum and Instruction

Director, Competency-Based Teacher Center. Purpose of the center is to design and test innovative teacher preparation program emphsizing competencies, personalization and modular instruction. Supported by USOE and Texas Education Agency grant.

Co-director, Southwest Technical Assistance Center. Provides technical assistance in competency-based teacher education to Teacher Corps programs and Colleges of Education in 15 universities in Southwestern United States. Supported by National Teacher Corps.

Director and Senior author of the Houston Needs Assessment System, designed for individual schools to explore their programmatic and teacher competency needs, and to formulate programs on the basis of results. Supported by grants from Texas Educational Renewal Center.

Co-Director, Competency-based Module Development Project. Exemplary modules are being designed through this project which is supported by USOE and the Teacher Corps.

Coordinating Committee, National Commission on Performance-Based Teacher Education, funded by Rockfellow Bros. to Educational Testing Service to focus national efforts in improving teacher education on vital issues, and coordinate those efforts.

Planning Committee, six regional and one national conference, 1972-1973, sponsored by the American Association for Colleges of Teacher Education; with responsibility for designing the program devoted to instructional development.

Member, Six-man Facilitation Team working with USOE Associate Commissioner on special assignment. During 1971-1972, projects have included USOE reorganization pattern, USOE staff interviews and training, Community Task Force, and Leadership Training Institutes reformulation.

Steering Committee, Texas Educational Renewal Center.

Consultant to about ten collegees in competency-based teacher education.

1961-1970 Michigan State University, East Lansing, Michigan

1961-1963 Assistant Professor
1963-1967 Associate Professor
1967-1970 Professor

1961-1964 Coordinator of experimental Student Teacher Education Program.

1966-1970 Director of Elementary Intern Program. EIP is a four-year undergraduate program culuminating in a full year of internship. Students complete all professional work in one of the eleven EIP centers, including educational psychology and sociology, teaching strategies, pre-internship teaching, and internship. Interns are supervised on a six to one ratio by intern consultants. Over 500 students were enrolled during 1969-1970. In each center, an MSU faculty member coordinates the instructional program, supervises intern consultants, and maintains communication with the local school districts and community college. The EIP Director is responsible for the statewide direction of the program.

1961-present Instructor in graduate and undergraduate classes in mathematics education and in elementary education

1961-present Consultant in elementary mathematics education to school districts in Michigan, Ohio, Illinois, Texas, and the Panama Canal Zone; to American Schools in San Salvador, Tegucigalpa, Honduras, Guatemala City, The Hague, Amsterdam, Rotterdam, and Dordrecht, Netherlands; and DOD schools in Heidelberg, Germany.

W. Robert Houston

1968	Project Director for the Behavioral Science Teacher Education Program, one of nine projects in the nation supported by the USOE Bureau of Research to develop innovative teacher education models. BSTEP focused on the contributions of the behavioral sciences to all aspects of professional and general education, and employed the "clinic behavior style" as a mode for development and implementation. More than 2700 explicit instructional modules were developed by a staff of over 150 professionals representing seven colleges in MSU, other universities, schools, and educational agencies. In addition, a complex information retrieval system was developed and a management design projected. Project Contract No. OEC-0-8-089025-3314 (010).
1969-1970	Project Director of Feasibility Study of BSTEP, again supported by USOE to determine the viability and potentiality of a competency-based, personalize modular program. PERT diagrams and designs were utilized in projecting sequences for program development; the theoretical constructs of a cost-benefit analysis system was initiated; use of futurists in education and faculty in-service education described; and an organizational plan developed. Project Contract No. OEC-0-9-320424-4042 (010).
Summer, 1963	Visiting Professor in mathematics education, University of Hawaii.
Summer, 1964-1965	Visiting Professor in mathematics education, Texas Technological College.
Summer, 1969	Visiting Professor in mathematics education, University of Washington.
1966-1968	Chairman, Research Committee, Mathematics Curriculu Committee, Michigan State Department of Education.
1967	Consultant to New York State Department of Educatio on clinical practice in teacher education.
1967	Director of a two-week conference for 30 college professors of mathematics education sponsored by the National Science Foundation. (NSF Grant)

W. Robert Houston

1960-1961	Research Associate, Department of Curriculum and Instruction, The University of Texas (television instructor and educational consultant for mathematics in-service education series, Austin Public Schools; educational consultant for several school districts).
1959-1960	Teaching Assistant, Department of Curriculum and Instruction, The University of Texas (Supervisor of Student Teaching; recipient of Kellogg Foundation and American Seating Company scholarships for advanced graduate study).
1955-1959	Elementary School Principal, Midland, Texas.
1952-1955	Assistant Principal and Dean of Students, Junior High School, Midland, Texas.
1949-1952	Elementary school teacher, Albuquerque, New Mexico and Midland, Texas.

Education

B.A.	North Texas State College, 1949
M.Ed.	North Texas State College, 1952
Ed.D.	The University of Texas, 1961

Bibliographic Sketch Included In:

Who's Who in Education
Who's Who in the Mid-West
Contemporary Authors
Leaders in Education - Fourth Edition
Dictionary of International Biography - Eighth Edi

Bibliography

Books

1. (With R.B. Howsam, ed.) *Competency-Based Teacher Education: Progress, Problems, and Prospects* (Palo Alto, Calif: Science-Research Associates, 1972).

2. *Strategies and Resources for Developing a Competency-Based Teacher Education Program* (Albany, N.Y.: Consortium of the States, 1972).

W. Robert Houston

3. (With others), *A Means to a Mission.* Washington, D.C.: National Center for the Improvement of Education Systems, USOE, 1972.

4. (With others), *Elementary Education In The Seventies.* New York: Holt, Rinehart and Winston, 1970.

5. (With others), *The New Elementary School Curriculum.* New York: Van Nostrand Reinhold, 1970, 384 pages.

6. (With others), *Understanding the Number System.* Columbus, Ohio: Charles E. Merrill, 1969, 189 pages.

7. (With others), *Extending Understandings of Mathematics.* Columbus, Ohio: Charles E. Merrill, 1969, 188 pages.

8. *Behavioral Science Elementary Teacher Education Program,* Volume I, Volume II, Volume III. (Editor and Project Director) East Lansing: Michigan State University (description of model teacher preparation program), 1968, 1975 pages.

9. *Feasibility Study of the Behavioral Science Teacher Education Program* (Editor and Project Director) East Lansing, Michigan: Michigan State University, 1970, 417 pages.

10. (With others), *Exploring Regions of Latin America and Canada.* Chicago: Follett, 1968, 414 pages.

11. *Improving Mathematics Education for Elementary School Teachers,* East Lansing: Michigan State University (report of 1967 Conference for professors of mathematics education), 105 pages.

12. (With C.C. Collier, R.R. Schmatz, W.J. Walsh) *Teaching in the Modern Elementary School,* New York: Macmillan, 1967, 310 pages.

13. (With Frank Blackington III and Horton Southworth) *Professional Growth Through Student Teaching.* Columbus, Ohio: Charles E. Merrill Books, Inc., 1965, 311 pages.

14. (With Roger Osborn, M.V. DeVault, and Claude Boyd) *Extending Mathematics Understanding.* Columbus, Ohio: Charles E. Merrill Books, Inc., 1961, 278 pages.

15. (With M.V. DeVault) *Sir Isaac Newton.* Austin: The Steck Company, 1960, 48 pages.

W. Robert Houston

Research Monographs

1. (With Others) *Television and Consultant Services as Methods of In-Service Education for Elementary School Teachers of Mathematics.* Bureau of Laboratory Schools Publication No. 14, The University of Texas, 1961, 125 pages. (A report of research project number 7-41-070.00, Title VII, National Defense Education Act, 1958).
2. *Selected Methods of In-Service Education and the Mathematics Achievement and Interest of Elementary School Pupils.* Unpublished doctoral dissertation: Austin: The University of Texas, 1961.
3. (With M.V. DeVault "Mathematics In-Service Education: Teacher Growth Increases Pupil Growth," *The Arithmetic Teacher*. (May, 1963), pp.243-247.
4. (With M.V. DeVault and C.C. Boyd) "Do Consultant Services Make a Difference?" *School Science and Mathematics*, (May, 1963), pp. 285-290.
5. (With Ann Olmsted and Frank Blackington) *Teacher Stances*: A Five-Year Study of Styles of Sixty Teachers. (East Lansing: Michigan State University, 1970).

JOURNAL ARTICLES, CHAPTERS, AND INSTRUCTIONAL SYSTEMS

1. (With Loye Y. Hollis), "Personalizing Mathematics Teacher Preparation," *Educational Technology*, March, 1972, pp. 48-50.
2. "Objectives for Prospective Elementary Teachers of Mathematics: A Developmental Process," *The Journal of Teacher Education*, Fall, 1971, pp. 326-30.
3. (With Bruce Burke), "Teacher Education As Interdisciplinary Study," Chapter 6 in Dan W. Anderson, et. al., *New Directions in Teacher Education* (Berkeley, California: McCutchan, 1972).
4. "Performance-/Competency-/or Proficiency-Based Teacher Education," (Washington, D.C.: ERIC Clearinghouse for Teacher Education, 1972).
5. Guide for Staff Development of School Administrators (Houston: Houston School District, 1972).
6. (With others), *Developing Instructional Modules* (Houston: College of Education, 1972). Includes 190-page worktext, Director's Guide, four slide presentations and five audiotapes.

W. Robert Houston

7. (With others), Developing a Volunteer Teacher Corps (Washington D.C.: National Teacher Corps, 1971). Includes an 87-page worktext, slide and audio-tape presentation.

8. Competency-Based Teacher Education (Austin: Texas Education Agency, 1972).

9. Strategies for Designing A Competency-Based Teacher Education Program (Austin: Texas Education Agency, 1972).

10. Houston Needs Assessment System (Houston: College of Education, 1972). Includes Director's Guide, several instruments, and a slide/tape presentation.

11. "Behavioral Science Teacher Education Program -- Feasibility Study Summary," Journal of Research and Development in Education, Spring, 1970, pp. 45-55.

12. (With John E. Ivey, Jr.) "The Michigan State Behavioral Science Elementary Teacher Education Program," Journal of Research and Development in Education, Spring, 1969, pp. 36-39.

13. "Objectives of Mathematics Education -- A Developmental Process" Section I in Improving Mathematics Education for Elementary School Teachers, 1967, pp. 11-19.

14. (With Julian R. Brandou) "Curriculum Revolutions and Science-Math," Format, June, 1969. p. 2-5.

15. (With John E. Ivey, Jr.) "The Michigan State Model Program," Elementary Teacher Training Models, 1969, pp. 36-39.

16. "A Guide to Behavioral Science Elementary Teacher Education Program," A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers, Washington, D.C.: ERIC Clearinghouse for Teacher Education, 1969, pp. 23-50.

17. (With William Joyce) "The Plowden Report: Englishmen Evaluate Primary Education," Childhood Education, October, 1968, pp. 106-110.

18. "The Challenge of In-Service Education," New Directions in Mathematics. Washington, D.C.: Association for Childhood Education International, 1965, pp. 65-70.

19. "Preparing Prospective Teachers of Elementary School Mathematics The Arithmetic Teacher, November, 1968, pp. 643-647.

20. (With W.R. Fielder) "Number Patterns: A ferreting Process," The Arithmetic Teacher, (March, 1962), pp. 119-121.

W. Robert Houston

21. "Evaluation and Self-Evaluation in Student Teaching," Chapter 10, Handbook for Student Teaching, ed. Hugo David, Dubuque, Iowa: Wm. C. Brown, 1964, pp. 457-475.

22. (With others) "Television and Consultant Services", Supervisory Behavior in Education, Ben M. Harris, Englewood Cliffs, N.J.: Prentice-Hall, 1963, pp. 457-475.

23. "Dimensions of Mathematics Instruction: Number Patterns," 30 minute audio-filmstrip. East Lansing, Michigan: Instructional Media Center, Michigan State University, 1964.

24. "Dimensions of Mathematics Instruction: Analog and Digital Instructional Materials," 30 minute audio-filmstrip. East Lansing, Michigan: Instructional Media Center, Michigan State University, 1963.

25. (With Hugh Greene) "Project: Mathematics - Videotape Teaches Teachers," NAEB Journal, (March, April, 1961), pp. 45-50.

26. "Shared Destiny," Social Studies Texas, IX, No.2 (November, 1957) p. 5.

27. "Identifying the Role of Mathematics Within the Total Program," Chapter V, Improving Mathematics Programs, ed. M.V. DeVault. Columbus, Ohio: Charles E. Merrill Books, Inc., 1961, pp. 146-192.

28. (With others) "An In-Service Mathematics Education Program for Intermediate Grade Teachers," The Arithmetic Teacher. (February, 1961), pp. 65-68.

VITA

KARL MASSANARI

Present Address:
1110 South Main Street
Goshen, Indiana
Telephone: 533-6569

Married. 4 sons
Date of Birth: May 20, 1915
Height: 5 feet 10 inches
Weight: 180 lbs.

Present Position:
Director of Teacher Education
Professor of Education
Goshen College, Goshen, Indiana
Began services at Goshen College in 1948.

Office:
Room #13, Administration Building
Goshen College, Goshen, Indiana
Telephone: 533-3161, Extension 221

Education:

Graduate of Fisher High School, Fisher Illinois, 1932

Graduate of Goshen College, B.A. degree, 1936
Major: Music Minors: History, English

Graduate school, Ohio State University, summer 1937, in Music Education.

Graduate work, University of Illinois
Education, Music Education, and History.

M. A. degree, 1942
Ed. M. degree, 1948 in Education
Ed. D. degree, 1949 in Educational Administration

Post graduate work, University of Minnesota, summer 1952, in Higher Education.

Professional Experience:

Secondary school teacher: Music, English, Mathematics
Berlin Public Schools, Berlin, Ohio, 1936-1937.

Secondary school teacher: Music, History
Mahomet High School, Mahomet, Illinois 1937-1942.

Secondary school administrator and teacher:
Mahomet High School, Mahomet, Illinois, 1942-1947.

Graduate Research Assistant, College of Education, Bureau of Research and Service, University of Illinois, Urbana, Illinois, 1947-1948.

Associate Professor of Education, Goshen College, 1948-1951.
Professor of Education, Goshen College. 1951-
Acting Dean, Goshen College, 1952-1956, 1963-1964
Director of Teacher Education, 1956-
Teaching courses in Secondary Education, Student Teaching, Developmental Psychology, Educ. Psychology, Methods of Teaching, Independent Study
Curriculum Consultant, Director of Guidance, and teacher at Penn High School, Mishawaka, Indiana, 1958-1959 (during Sabbatical leave).

Professional Activities:

Consultant Activities

Champaign-Urbana School Survey (by University of Illinois), 1948.
Peoria, Illinois, School Survey, (by University of Illinois), 1949.

Culp, Arkansas, School Survey, 1958.

Curriculum Consultant, Penn High School, 1958-59.
Accreditation Consultant, Penn High School. 1959-60.
Elkhart County School District Reorganization Committee, 1960-61;
Advisor and Author of Committee's Comprehensive Report.

Teacher Education Consultant, North Central Association Workshop, University of Minnesota, summer, 1962.

Betania School, Aibonito, Puerto Rico, summer, 1962.

Nappanee Public School Survey, 1962.

Middlebury Community Schools Survey, 1965.

Goshen Community Schools Survey, 1965.

Consultant for selected institutions seeking NCATE Accreditment.

NCATE Activities

(National Council for Accreditation of Teacher Education)

Member and Chairman of NCATE Visiting Teams for colleges in Michigan, Iowa, and Illinois, 1957-

Member of the NCATE's Visitation and Appraisal Committee (V & A Committee) with meetings in Minneapolis, St. Louis, and Kansas City, 1961-1964.

Associate Director, NCATE, Washington, D.C., summer, 1964.

Other Professional Activities

Member: North Central Association Liberal Arts Study Steering Committee, 1954.

Member: Steering Committee, Indiana Teacher Education Workshop, 1955-1957.

Member: North Central Association accreditation teams visiting Middlebury High School and Penn High School, 1957-1959.

Chairman of Goshen College faculty team of participants in the Danforth Foundation Workshop, Colorado College. summer, 1958.

Member: State of Indiana Accreditation Team for Bethel College, 1963.

Member of seven-man study team to POLAND, April, 1963, sponsored by the American Association of Colleges for Teacher Education and the U. S. Department of State.

Secretary: Goshen College Faculty.

Member of Goshen College Faculty Committees:
- Library
- Curriculum and Instruction, Chairman
- Plans and Projects
- Teacher Education Advisory Council, Ex. Secretary

Traineeship: University of Minnesota - 1965 (one week)
Mental Retardation

Member: Indiana State TEPS Committee 1965-67

President-elect Indiana Association for Student Teaching (AST) - 1966-67

Association Memberships

American Association of Colleges for Teacher Education
Indiana State Teachers Association
International Council on Education for Teaching
National Association of Secondary-School Principals
National Education Association
Phi Delta Kappa
Association for Student Teaching

Talks

A series of radio addresses on reorganizing school districts, WILL, University of Illinois, 1947-1948.

Talks to PTA groups, teachers' workshops, school administrators, Sunday School teachers, Professional organizations, alumni groups, etc.

Commencement addresses.

Publications and Writing:

Publications

1. "Democratic Participation in the Formulation of a High School Award System", School Activities, September, 1947.
2. "A Technique for Identifying 'Community Pull'", The Journal of Educational Sociology, December, 1947, p. 198, Volume 21, No. 4.
3. "Don't Undermine Reorganization", Illinois Education, March, 1948.
4. "Campaign for Reorganization: A Case Study of Five Community Unit School District Elections", Illinois Education, October, 1948.

5. "Public Opinion as Related to the Problem of School District Reorganization in Selected Areas in Illinois", Journal of Experimental Education, June, 1949, Volume XVII, No. 4, pp. 389-453. (Major portion of doctoral thesis).

6. "A Comprehensive Plan for the Reorganization of the School Corporations of Elkhart County, Indiana", October, 1961 (Mimeographed)

7. Editor, TEB, (Teacher Education Bulletin) Goshen College, Goshen, Indiana.

8. "Teacher Education at Goshen College: A Handbook for Students and Counselors", 1963.

Unpublished Writings

1. "Steps Ahead in Teacher Education" (at Goshen College).

2. "The Role of the School in Mental Health", June, 1957.

3. "Junior Field Work in Secondary Education", Handbook, 1961.

4. "Teacher Education at Goshen College: A Report to the National Council for Accreditation of Teacher Education", January, 1966.

Five major evaluation reports prepared for the National Council for Accreditation of Teacher Education:

5. Report of the Visiting Team on Clarke College, Dubuque, Iowa.

6. " " " " " " Hillsdale College, Hillsdale, Michigan

7. " " " " " " Hope College, Holland, Michigan.

8. " " " " " " Illinois Wesleyan Univ., Bloomington, Illinois.

9. " " " " " " Olivet College, Olivet, Michigan.

Community Activities:

Member: College Mennonite Church, 1948-

Sunday-School teacher and department chairman of high school-age youth, College Mennonite Church, 1950-1953.

Member: Church-Chapel Board of Directors, Inc., 1959-

Member and past president: Goshen Exchange Club.

Bulletin Editor, Goshen Exchange Club, 1962-63; 1964-
(Bulletin won top state award two times)

Member: Elkhart County Study Committee, 1965

Member: Elkhart County Economic Opportunity Act Planning Committe, 1965-

Chairman: Publicity Committee for Greencroft Villa Retirement Community Center, 1965.

AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION
One Dupont Circle, Washington, D.C. 20036 (202) 293-2450

February 1970

Supplement to Karl Massanari VITA

Present address:

7012 River Road
Bethesda, Maryland 20034

Telephone: 229-5847

Present position:

Associate Secretary, AACTE
One Dupont Circle,
Washington, D. C. 20036

Telephone: 202-293-2450

Professional experience:

Served as staff person for the Evaluative Criteria Study Committee which developed new national standards for the accreditation of teacher education, 1966-1969.

Member of lecturing staff, Washington International Center.

Consultant to a number of member institutions of AACTE.

Other professional activities:

Addresses to a number of professional organizations, including
- American Home Economics Association
- American Association of Health, Physical Education, and Recreation
- National Association of Schools of Music
- National Association of Art Education
- American Association of Theatre Educators
- NEA's Department of Audio-Visual Education
- Associated Organizations of Teacher Education

Member of NCATE's new committee on Standards and Process
Director, AACTE's Performance-Based Teacher Education Project
Consultant to state departments of education and colleges and universities about performance-based teacher education/certification

Supplememt continued

Publications

Editor, Evaluative Criteria for Accrediting Teacher Education: A Source Book on Selected Issues, published by AACTE, 1967.

Author, "The AACTE-NCATE Feasibility Project: A Test of Proposed New Accreditation Standards for Teacher Education", Journal of Teacher Education, Spring 1969.

Participant in writing the new accreditation standards Recommended Standards for Teacher Education, published by AACTE, 1969.

Author, "AACTE Explores Performance-Based Teacher Education", AACTE Bulletin, Volume XXIV Number 1/ March 1971

DR. KARL MASSANARI

Dr. Karl Massanari is at the present time serving as an Associate Director for the American Association of Colleges for Teacher Education and as the Director of the AACTE Performance-Based Teacher Education Project. He has been with the Association since August, 1966 and has assumed the staff responsibilities for developing new standards for teacher education. These standards are now being used by the National Council for Accreditation of Teacher Education. In addition to providing continuing staff leadership for the Committee on Standards, he has staff responsibilities in directing the national component of the Texas Trainers of Teacher Trainers Project which is funded by USOE.

September 24, 1971

KM:sb

VITA

DAVID A. POTTER

1. Personal Data

Born: September 7, 1942
Height: 5'10"
Weight: 155
Marital Status: Married, two children
Military Status: 1-D
Address:
500 Princeton-Kingston Road
Princeton, New Jersey 08540

Phone:
Business - 609/921-9000
Home - 609/924-4770

2. Employment History

1971-present: Associate Research Psychologist, Educational Testing Service, Princeton, New Jersey. Basic duty - conduct research into the relationship between teacher behavior and student growth. Other related duties involve participation on the coordinating committee of a proposed National Commission on Performance-Based Education; preparing and presenting a segment of an intensive resident course on "Inservice Teacher Evaluation:" meeting with various external groups to discuss the research of the Teacher Behavior Research Group; directing segments of research projects; supervising the day-to-day operations of the research group; and proposal and budget preparation.

1970-1971: Supervisor, Organization and Personnel Consulting, Ernst & Ernst, St. Louis, Missouri. Duties include management consulting assignments for a variety of clients in industry, health, and government. These engagements involve areas such as organization planning, management evaluation and testing, compensation, operations review of personnel departments, EEOC compliance, and position description and evaluation.

1969: Instructor, summer session, Department of Psychology, State University of New York, College at Cortland, New York. Duties involved teaching an undergraduate course in industrial psychology and an undergraduate-graduate level course in social psychology.

1968: Research Assistant, Department of Psychology, Cornell University, Ithaca, New York.

1968: Lecturer, Department of Psychology, University of Delaware, Newark, Delaware. Duties involved teaching an undergraduate course in developmental psychology and supervising a special studies program for several graduate students (in conjunction with the developmental course).

1966-1969: Teaching Fellow, Department of Psychology, Cornell University, Ithaca, New York. Assisted in courses in general, industrial, and social psychology; theories of personality, statistics, and research design.

3. Education

Ph.D. in Personality and Social Psychology, with minors in Industrial Psychology and Organizational Behavior (the latter in the College of Industrial and Labor Relations); Cornell University, Ithaca, New York, 1970.

M.A. in Social Psychology and Industrial Psychology, Cornell University, Ithaca, New York, 1968.

B.A. in Psychology, University of Delaware, Newark, Delaware, 1966.

4. Honors

Phi Kappa Phi, Cornell University - Member
Psi Chi, University of Delaware - Member
NIGMS Trainee in Social Psychology, Cornell University, 1969-1970.
Halsey M. MacPhee Psi Chi Award as the outstanding senior in the Department of Psychology - University of Delaware, 1966.

5. Selected Publications

Social Comparison Theory: The evaluative drive as a function of perceived utility of evaluative information. Master's thesis, Cornell University, 1968.

Leadership Training Program for the National convention of Chi Phi Fraternity at Cornell in 1968. The program included lectures, movies, and demonstration and laboratory-type groups.

Accuracy and Interpersonal Attraction. Doctoral dissertation, Cornell University, 1970.

Why Certification? Paper presented to the Hofstra Consortium on Teacher Performance Criteria, Hofstra University, 1972.

Accuracy of interpersonal evaluations and liking reciprocity. To be published as a Research Bulletin, Educational Testing Service, 1972.

Performance-Based Teacher Education: Issues and Strategies. Symposium organized for the annual convention of the American Educational Research Association, New Orleans, 1973.

Personalism and Interpersonal Attraction. In press, Journal of Personality and Social Psychology.

Research Strategy for PBTE. Paper to be presented as part of a symposium on performance-based teacher education at the annual convention of the American Educational Research Association, New Orleans, 1973.

The relation of student achievement and student ratings of teachers. Paper to be presented to the annual convention of the American Educational Research Association, New Orleans, 1973.

6. Related Professional Experiences

Member, Coordinating Committee, National Commission on Performance-Based Education.

Member, Board of Visitors, Teacher Education Research Center, State University College, Fredonia, New York.

Member (ETS Representative), Hofstra Consortium on Teacher Performance Criteria.

Chairman, Reinforcement and problem-solving behavior. Paper session, annual convention, American Psychological Association, Honolulu, 1972.

Invited member, panel discussion on evaluation of college teaching. New Jersey State Conference, American Association of University Professors, November, 1972.

Reader, Program Committee (Division 15) for the annual convention of the American Psychological Association, 1972.

7. Professional Societies

American Educational Research Association

American Psychological Association

Phi Kappa Phi

Psi Chi

7. References - will be furnished upon request.

Allen A. Schmieder
U.S. Office of Education
7th & D ST SW
Washington, D.C. 20202

Born: January 20, 1933 in Union City, Pennsylvania

Family: Father, William E. Schmieder, Mother, Louise E. Schmieder, Tucson, Arizona (Formerly of Erie, Pennsylvania); five sisters and one brother.

Married: June 10, 1957 to Janet Ruth Hatch of Erie, Pennsylvania. She is a graduate of Edinboro State College where she majored in Art and has done graduate work in Fine Arts at The Ohio State University. She has held a variety of positions in Art and Art education and has taught in-both the schools and the university. Although working in most phases of fine arts, she is most interested in painting and has shown her paintings in numerous local and national shows.

Children: Anderson McNeille, Age 12; H. Adam, Age 6; and Ashley Allen, Age 3.

Height: 6'1"   Weight: 190   Health: Excellent

Formal Education:

Wesleyville High School, Wesleyville, Pa., 1950
B.S. in Education - Edinboro State College, Edinboro, Pa., Majors in English and Geography, Minor in Social Studies, 1955.
M.A. in Geograpny - The Ohio State University, 1956 - special emphasis on human geography and Latin America.

Ph.D. in Geography - The Ohio State University, 1963 - special emphasis on historical geography, Anglo-American geography, Soviet geography and educational geography.

Employment:

Instructor, Geography Department, The Ohio State University, 1956-61

Professor, Geography Department, University of Maryland, 1961-65.

United States Office of Education, 1965-72

Chief, Geography Section, 1965
Chief, Social Sciences, 1966-67
Deputy Director, Educational Personnel Training, 1968-69
Director, Trainers of Teacher Trainers Program (TTT), 1969-71
Director, Task Force '72, Action Committee on Educational Reform
Director, Task Force 73--Forward Thrusts, 1972

Vitae for Allen A. Schmieder,

Professional Organizations:

National Council for Geographic Education, Executive Board
National Council for the Social Studies
Association of American Geographers, Chairman, Geographers in the Federal Government

Honors, Awards:

Outstanding Professor Award, The Ohio State University, 1959, 1960
University of Maryland, 1962,1963,1964

Who's Who Among Students in American Universities and Colleges, 1954-55
Who's Who in the East, 1969-72, Who's Who in Government, 1971
Who's Who in American Education, 1971

Kappa Delta Pi, National Education Honorary Society, Gamma Theta Upsilon, National Geography Honorary Society.

Quality Service Award, U.S. Government, 1969.

Publications:

A Dictionary of Basic Geography, Allyn-Bacon, Co., 1970, second printing, 1971; The Historical Geography of the Erie Triangle, University Microfilms Press, 1963; Reformese Jargon: A Glossary on Educational Reform, USOE, 1972; over 50 articles and monographs on geography, the social studies and teacher education.

In Preparation:

The Myth of the Population Explosion and Ecological Overskill in Contemporary America

Poetry-Philosophy Series: *

Some Profound Simplitudes
And So I Asked Myself
New Forms
Love Poems
Dialogues with God
Conference Poems

*Many poesm from the following series have been published separately. Approximately ten are scheduled for inclusion in the September, 1972 edition of Todays Education

Vitae for Allen Schmieder, [illegible]

Lectures:

Delivered approximately 500 lectures over the past 15 years to schools, colleges, civic organizations and professional groups.

Some selected national programs: American Association of School Administrators, Association of American Colleges for Teacher Education, National Council for the Social Studies, American Educational Research Association, National Council for Geographic Education, Association of American Geographers, American Historical Association, American Economics Association, American Political Science Association, American Society for Curriculum Development, National Council of Teachers of English, American Association of Land Grant Colleges and Universities, Southern Association of College Presidents, NEA GRIP Conferences(6), Annual State Education Meetings, (Alabama, Arizona, California, Georgia, Maryland, Ohio, Texas, Vermont, New Hampshire)

Since 1965 have traveled approximately one-half million miles visiting schools, colleges, universities and communities to observe outstanding education programs and to discuss important national education issues.

Have served on several special task forces--President's Task Force on Inter-Agency Talent Development, President's Task Force on National Teaching Awards, Department of H.E.W.'s Task Force on Crises in American Education.

One of the architects and OE program monitor of the North Dakota Project in Education which was highlighted in Silberman's Book, Crisis in American Education.

When reviewing some of the highlight's of american education in the 1960's the New York Times, described the TTT Program as possibly the most significant new federally sponsored educational program of the decade.

Director of Task Force '72, A U.S. Office of Education task force charged with examining current movements in national educational reform and their implications for U.S. Office of Education Programs. The Task Force which emphasized communication and involvement with the field met directly with over 10,000 educators and was responsible for the development of approximately 30 separate reports on educational reform. The most significant of these were: Competency-Based Teacher Education: Progress, Problems, and Prospects (Palto Alto, California, SRA, June 1972; The Power of Competency Based Teacher Education (Boston, Allyn & Bacon Co., 1972); Task Force 72 Final Report, U.S. Government Printing Office, 1972.

Appendix C

Activities of Coordinating Committee

January, 1972

Resume of the Proposal

1. The Rockefeller Brothers Foundation awarded a grant of $69,000 to Educational Testing Service for the purpose of doing a ten-month's feasibility study concerning the establishment of a consortium of states that would move the member states toward adopting effective teaching performance as the criterion for teacher certification. Frederick J. McDonald of ETS was appointed Director, and Horace Aubertine of Illinois State University was appointed Assistant Project Director (part-time).

   More specifically, the purposes of the feasibility study were

   a. to select states for participation in the consortium;
   b. to develop, in each state selected, a commitment to create a task force that would develop a plan for modifying its teacher certification system;
   c. to help create in each state a working task force that would draw up a plan to change the state's certification processes;
   d. to assess in each state what problems might be encountered in developing a new system of certification;
   e. to assess the costs of developing such a system;
   f. to develop a plan for a permanent consortium of states that would work together to change certification practices.

g. to write a proposal noting the funds required to operate a consortium and to conduct the research-and-development plan. Funding for this proposal would be sought from federal and state agencies and private foundations;

h. to initiate the formal organization that would carry out the work of the consortium.

Four kinds of activities were to be undertaken over the ten-months' period: (1) creation of Coordinating Committee charged with the responsibility of drawing up a plan for the consortium; (2) meetings of the principal officers of the states' educational systems, deans of major teacher-training institutions, and superintendents of major city school systems; (3) meetings of the general advisory council in consultation with the Coordinating Committee for purposes of program planning and implementation; (4) meetings of the Task Force in each state and periodic meetings with the Coordinating Committee or individual members thereof.

It was assumed that, at the conclusion of this time, each state would have developed a plan delineating three distinct phases related to (a) performance-based certification and (b) performance-based education programs, including development and implementation, and (c) formative and summative assessment schemes.

2. The initial major activity planned by the interim Coordinating Committee was to hold a meeting in Atlantic City, on February 16th, to coincide with the American Association of School Administrators (AASA) convention. The purpose of this meeting was to obtain input on the idea of a National Consortium of States on Performance-Based Education and Certification from a sample of educators and public officials. In preparation for this meeting the Coordinating Committee prepared and sent to selected individuals "A Proposed Organization for the Consortium of States to Develop a Plan for the Performance-Based Certification of Teachers," and also an outline of what it considered the role and tasks of various groups to be.

February, 1972

1. Attending the Atlantic City meeting, on February 16, were representatives of state departments of education, the Office of Education, teacher-training institutions, private funding agencies, professional organizations, and civic groups. At the formal meeting five reports were given on the state of the art of performance-based education (PBE). Allen Schmeider of the Office of Education gave an overview of national organizations and groups concerned with PBE; Benjamin Rosner of CUNY discussed Task Force '72 and identified as a key problem the measurement of teacher competency as

related to pupil performance; Jim Steffenson reported on the Teacher Corps and its activities in this area; Karl Massanari gave background information on the American Association of Colleges of Teacher Education's (AACTE) Committee on Performance-Based Teacher Education and the state of the art as revealed through commissioned papers; and Theodore Andrews of the New York State Education Department discussed the Multi-State Consortium, which was attempting to develop a management system needed to move P.B.T.E. and teacher certification from initial conception to full implementation.

2. A major directional change occurred in the Coordinating Committee's thinking at this time, although it did not yet emerge as a policy decision.
    a. It had been assumed that state superintendents would play a major role in the development of PBTE certification procedures, but it was apparent from the comments of many state superintendents that they were dealing with too many other problems to give this movement their concerted effort. In addition, PBE certification presented them with many problems related to their relationship with various teacher associations.
    b. The Multi-State Consortium appeared to be struggling with the certification issues and there was some question about duplication of resources.
    c. There was still some feeling that the consortium could be developed around the certification officers currently interested and doing some work in this area, but only if teacher training institutions could be found in those states

working on performance-based teacher training. Florida appeared to be the only state that had a close-knit relationship between teacher trainers and certification officers working on P.B.T.E. programs and certification. There were other states moving in this direction, but not enough to make a consortium feasible.

3. It was the consensus of those who participated in the day-long deliberations at Atlantic City and those who met informally that a form of national organization was needed to develop a perspective on the P.B.T.E. movement and give it direction. At present no one group, agency, or institution could fulfill these goals. A decision was made at this meeting to hold a two-day conference in March at ETS in Princeton with a broad range of persons engaged in P.B.T.E. and certification. In addition, the project director and assistant project director planned to attend the AACTE and the Association of Teacher Education (ATE) meeting in Chicago (February 21-24) for the purpose of continuing their informal interviews of deans and teacher trainers and other groups attending the meeting, and of inviting interested parties to the Princeton meeting.

4. AACTE-ATE meeting in Chicago, February 21-24

   During this time the project director and assistant project director met in a series of meetings and informally with many educators and state department of education officials to discuss the feasibility of a National Consortium on P.B.T.E. Many individuals indicated that a national consortium should be broader in scope than just state department personnel and should include all persons and groups working on performance-based teacher education and certification. Several of those with whom the director and assistant director had meetings expressed a willingness to discuss the Consortium of States notion at greater length and accepted invitations to come to the meeting in Princeton in March.

March, 1972

Princeton, March 14-15

1. Attending this meeting were ten state department personnel, representing six states, as well as Ted Andrews, chairman of the Multi-State Consortium; 17 college and university deans and directors of teacher education, located in 13 states; and representatives of the Office of Education, AACTE, the Ford Foundation, and the Teacher Corps.
2. The two-day meeting had been organized by an enlarged Coordinating Committee. Fred McDonald and Jack Hollister of ETS, and Horace Aubertine of Illinois State, had been joined by Robert Houston, Professor of Education at the University of Houston, an expert in the design, implementation, and assessment of competency-based teacher-education programs; Ted Andrews, Associate in Teacher Education at the New York State Department of Education and chairman of the Multi-State Consortium; and Karl Massanari, Associate Director of the AACTE and chairman of its Performance-Based Education Committee.

The participants reached consensus that a national organization on P.B.T.E. training and certification was not only desirable, but should be activated as quickly as possible. Some of the reasons for supporting this national organization were:

a. the lack of a centralized agency that could collect, organize, and disseminate information about P.B.T.E. and certification throughout the nation;

b. the need to place into perspective the scope and direction of the movement, what has to be done, as well as the definition of "what is meant by performance-based teacher education?";

c. the need for some mechanism in which an institution, individual, or state could get assistance or find out where assistance might be obtained relative to a particular P.B.T.E. problem or issue;

d. the need for an organization to conduct research and development work in P.B.T.E. that could not be done at present within current institutions or agencies. This last point was given great emphasis by the participants, and the Coordinating Committee took cognizance of this fact in later developments.

The participants also made the following observations and recommendations concerning the consortium and the concept of a consortium:

a. Having a consortium would permit a more comprehensive P.B.T.E. and P.B. teacher certification movement than was possible with separate institutions or groups.

b. The consortium would provide greater visibility, impact, and interest than any other single institution or group could provide.

c. There were greater possibilities of attracting external funding with a consortium than with individual institutions or projects.

d. A group effort could encourage and coordinate other group efforts.

e. A group effort could establish standards on which to evaluate performance of individuals and groups and P.B.T.E. programs.

3. Many issues and problems raised by those attending the meeting were left to the Coordinating Committee to discuss and then prepare a consortium proposal for dissemination. It should be noted here that those problems raised in Atlantic City concerning a State Concortium had now been fully discussed by the participants at Princeton and by the Coordinating Committee. A P.B.T.E. consortium representing many constituencies was now being recommended. At the end of this meeting the project director officially announced the Coordinating Committee membership as follows:

Theodore Andrews
Robert Houston
Karl Massanari
Howard Coron *

Fred McDonald, Director
Horace Aubertine, Assistant Director
Jack Hollister, ETS
James Deneen (ex officio), ETS

4. The Coordinating Committee met briefly at the end of this meeting and set April 10-11 for the accomplishment of the following objectives:
   a. to review the input of the various participants in formal meetings, and the input of various informal discussions;
   b. to establish a time schedule for work sessions of the Coordinating Committee;

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* Professor Howard Coron, Director of Student Teaching and the Teaching Performance Center at New York University and a Policy Board Chairman of a New York State Trial project in Performance-based teacher education was asked to join the Coordinating Committee, at the conclusion of the meeting.

c. to define roles and tasks of members of the Coordinating Committee;

d. to discuss possible organizational patterns for a National Consortium and possible projects that could be undertaken during the first year, the next five years, and over a decade.

April, 1972

Work of the Coordinating Committee

1. Outcomes of the Coordinating Committee meeting, on April 10-11:
    a. A schedule for future meetings was established. The Committee would meet at E.T.S. on:

April 24-26
May 1-2
May 15-17
June 5-6
June 19-20

2. A preliminary draft of a proposed National Consortium was readied for a May 1 presentation to the Multi-State Consortium May 3 meeting to be held at Sugarbush Inn, Warren, Vermont. Members of the Multi-State consortium would be asked to suggest revisions of the draft.
3. A revised working paper was mailed to the full Multi-State Consortium (representatives of eleven states).
4. A third working paper was prepared, based on the input received from the membership. It was anticipated that the P.B.T.E. National Consortium plan would be far enough along for a meeting, to be held at ETS early in the summer, with representatives of foundations that might be interested in funding various aspects of the program.

5. At its April meeting the Coordinating Committee addressed itself to:
    a. the establishment of objectives of the Consortium for the next two years, the next five years, and the next ten years;
    b. the outlining of specific systems or structures that the National Consortium would establish (for example, a National Assessment Center).

May 1972

1. The culmination of the work sessions of the Coordinating Committee was a working paper submitted to a meeting of the nine State Consortium project, on May 5 at Sugarbush Inn, Vermont, under the direction of Theodore Andrews.
2. A key decision was made as a result of the meeting in Vermont. It was decided to abandon the notion of a "Consortium of States" and to adopt the concept of a "National Commission". A National Commission would be less restrictive and provide greater opportunities for individuals and institutions within a state to participate. Furthermore, a National Commission did not rule out the possibility of an entire state's becoming a full member.
3. The results of the Coordinating Committee's work by May 30 was compiled in a preliminary document, which was to be examined and re-edited at the next meeting, on June 1-4, at Lumberville, Pennsylvania.

4. The Working Style of the Coordinating Committee

The Committee was composed of individuals, some of whom had had only superficial contact with each other prior to being named to the Coordinating Committee, but who were aware of each other's activities in the P.B.T.E. movement. Their selection to the Coordinating Committee was based on their history of involvement in the P.B.T.E. movement, knowledge of the subject, their willingness to give a great deal of time to working on the project, their general enthusiasm about the potential of P.B.T.E., and their task-orientedness.

During the various meetings it became apparent that the Coordinating Committee was composed of individuals who could accept and build upon the ideas of other members, reject inappropriate ideas as related to the overall goals of the Commission, and give constructive criticism. During the long hours the group was together, the members observed that they were so attuned to each other's thinking that they could often finish the sentences begun by others. At the same time, they were sophisticated enough to hold for a future agenda comments which might indicate that an individual was taking a tack not useful to the group at the particular time. This supportive behavior reinforced for each member his desire to continue working with the group.

Much of the meeting time was taken up by group discussions. As ideas were clarified and projects suggested, small task groups met to flesh out the ideas, then bring them back to the larger groups for analysis and further development. Often individuals would take the materials and spend time at home preparing a more detailed analysis of the group's ideas. Constant evaluation sessions were held and new directions emerged as a result of the interaction. The group consistently reviewed the input of other professionals and incorporated those ideas that furthered the development of the Commission. Quite often members of the group played devil's advocate solely for the purpose of clarifying the ideas. It became apparent that the members were learning from each other; there was little need to take "ego trips" or to present credentials. The members trusted each other.

June, 1972

1. At the work session at Lumberville, Pennsylvania, on June 1-4, the Coordinating Committee analyzed and edited the progress report of work, dated May 30.
2. Members of the Coordinating Committee met on June 5 with President Turnbull and other officials of ETS to discuss the progress and projections of the Coordinating Committee at that point in time. Some of the suggestions offered were:
    a. There was a need to re-examine the organizational structure and to reconsider developing a highly centralized structure.
    b. Discussions should be held concerning the concept of a Board of Trustees, and their role.
    c. It might be helpful to include a historian on the first-year planning staff to document the development of the National Commission.
    d. A statement was needed on the need for and scope of the National Commission.

3. On June 19-21, the Coordinating Committee met at Houston, Texas to:
   - a. examine the revised progress report (June 16) based upon the work at the Lumberville meeting and the outcome of the meeting with E.T.S. officers on June 5 at Princeton;
   - b. establish a calendar of activities for the remaining months of the planning period;
   - c. develop additional projects related to the Commission.

Additional Outcomes were these:

- a. An invitational conference was set up to be held on August 10-12 at ETS in Princeton, New Jersey, for the purpose of obtaining input from invited experts in two areas of immediate interest to the Coordinating Committee and other participants:
  1. Models of teaching and teacher training.
  2. The training of teacher educators.
- b. A summary statement completed July 31, 1972, was prepared for the participants at the August conference.
- c. Specific follow-up meeting dates were deferred until the August meeting.
- d. A proposed meeting with national leaders of teacher organization groups, scheduled for July, was cancelled because of inconvenient time. This cancellation concerned the Coordinating Committee. It was apparent that too few leaders of teacher organizations had been represented in the deliberation although individuals had been contacted on an informal bases.

August, 1972

1. An invitational conference was held at Princeton, New Jersey, on August 10-12 for the purpose of gaining input relative to the following topics:
    a. Models of teaching and their implications.
    b. Training of teacher educators.
2. Attending this meeting, besides the Coordinating Committee, were ten individuals involved in the implementation of P.B.T.E. programs. In addition, there were representatives from the Office of Education and the Florida State Education Department.
3. The conference fell somewhat short of achieving its intended objectives. The general discussion that ensued during the conference period indicated clearly to the Coordinating Committee that:
    a. it had addressed itself to the central issues regarding P.B.T.E. during their spring sessions. The ideas that emerged from the conference participants had been identified and discussed at some length by the Coordinating Committee earlier in the year;
    b. it became quite evident again that one of the immediate priorities of the National Commission would be to survey the field and develop perspective on the P.B.T.E. movement;
    c. it was soon realized that other professions (medicine, dentistry, nursing, law, engineering and others) were interested in performance-based education. As a result, the word "teacher" was dropped from the title of the organization to symbolize the broadening of the National Commission's scope;

d. Allen Schmeider of the Office of Education was invited to become a member of the Coordinating Committee;

e. a meeting date of September 14, 15, and 16 was set for the purpose of:

  1. presenting working papers on:
    a. A Rationale for the National Commission (Karl Massanari)
    b. The Models of Instruction (Bob Houston: Howard Coron)
    c. The Logistics of Program Implementation (Horace Aubertine)
  2. continuing discussion on the nature and structure of the Commission and the composition of the Coordinating Committee.

September, 1972

1. The Coordinating Committee met at Princeton on September 14, 15 and 16, and formulated the general outlines for specific projects to be considered during the first year of operation of the National Commission.

  a. Proposal topics selected were based upon the following criteria:
    1. immediacy of need and contribution to P.B.E. movement;
    2. those which were not being done or could not be done readily by any existing agency, institution, or state.

  The proposed topics were:
    1. Models of instruction coupled with taxonomies of teaching (Houston and Coron);
    2. Training educators for managing program implementation (Aubertine);

3. Survey of P.B.E. and certification as a means to develop national perspective.

b. Agreement was reached to develop the National Commission's administrative structure on an evolutionary/gradual basis. The first year of operation would be an interim stage in which:
    1. the Advisory board membership, the policy-making unit of the Commission, could be formulated in a deliberate manner;
    2. the cost of administrative operation could be more closely tied in with emerging policies and programs as determined by the advisory board;

c. More detailed analysis of the projects was needed for the Coordinating Committee's work session and for assembling and synthesizing the components for the work and proposal to the Rockefeller Brothers Foundation in November of 1972.

October, 1972

The Coordinating Committee met at Princeton, October 5, 6. and 7, for the specific purposes of:

1. reviewing and revising the four proposals for the first-year activities of the National Commission:
    a. developing models of performance-based education;
    b. planning and conducting a Management-Training Institute for Personnel in PBE Program Implementation;
    c. survey of PBE and Certification throughtout the United States;
    d. establishing a National Clearinghouse for PBE.

SUMMARY OF KEY DECISIONS AND DEVELOPMENTS DURING THE PLANNING PERIOD

1. The nature of the national organization changed from a "Consortium of States" to a "National Commission." The latter expands the eligibility of membership to include individuals, agncies, and institutions, in addition to states.

   The National Commission's activities:

   a. focus on the evolvement of a "Consortium of Foundations" in addition to government agencies interested in P.B.E. in funding projects.

   b. seek long-range funding commitments for National Commission's operation.

2. The proposed framework of the National Commission would consist of the following posts and policies:

   a. Advisory board (policy determination)

   b. Coordinating Committee (responsible for policy implementation and management of activities)

   c. Special task forces to carry out projects based on policies formulated by the National Commission

   d. Activities undertaken by the National Commission would be confined only to those areas that cannot be accomplished by machinery in existing organizations

   e. The National Commission would be an independent, non-profit organization

   f. During the first year, the Commission's organization would function with an interim or intermediate administrative operation.

3. The National Commission on P.B.E. will include in its scope of interest and activities the professions of medicine, dentistry, nursing, pharmacy, law, and engineering, in addition to teacher education.

4. The first year's activities of the National Commission will be as follows:

   a. To set four task forces:

1. survey of P.B.E. nationwide.
2. instructional models development.
3. management training for educational implementation.
4. national clearing house for P.B.E.

b. To establish an advisory board and incorporate the National Commission:

1. location of administrative offices.
2. selection of executive director and support staff.

c. To develop a perspective paper on status on P.B.E., which also suggests:

1. immediate priorities (1-3 years)
2. intermediate priorities (3-5 years)
3. Long range plans (5-10 years)

d. To seek a broad base of financial support.

Appendix D

Program Manager Position Description

TITLE: Program Manager

REPORTS TO: Executive Director

BASIC FUNCTION: under administrative direction, coordinates the day-to-day operations of the Commission.

QUALIFICATIONS: Master's degree in business administration or equivalent experience; must include familiarity with basic accounting and financial management procedures.

- At least one year's experience in an educational research and development setting
- Demonstrated ability to coordinate proposal and report writing for federal agencies and foundations.
- Demonstrated ability to communicate effectively in written and spoken English
- Demonstrated ability to build and maintain good interpersonal relations with diverse segments of the educational community (e.g., teacher educators, educational researchers, foundation personnel, USOE and NIE staff)

BASIC RESPONSIBILITIES:

- Monitors project funds and expenditures
- Prepares budgets for proposals
- Maintains accounts of the Commission
- Prepares the Commission payroll
- Monitors task-force and project progress
- Maintains information regarding funding sources (foundations, USOE, NIE, etc.)

- Establishes and maintains contact with funding sources
- Coordinates proposal preparation
- Coordinates and implements preparation of progress and final reports for programs
- Maintains contact with field personnel (task forces, project directors)
- Maintains Commission records
- Makes arrangements for meetings of Coordinating Committee, Board of Trustees, task forces, etc.

Appendix E

Model Development Proposal

Operational Goals

Year One

1. Design specifications for five widely different PBE models.
2. Plan for development and testing of models.
3. Initiate design of model assessment procedures.
4. Develop an appropriate taxonomy for each model.
5. Demonstrate salient characteristics of each model through videotaped episodes.

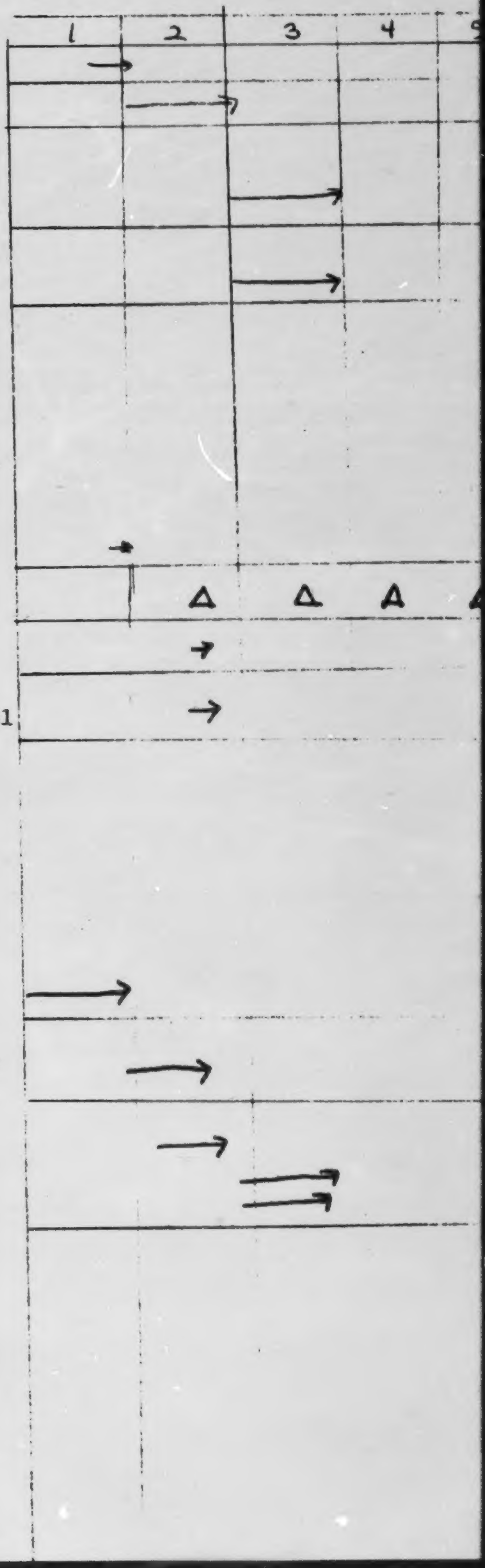
Year Two

1. Develop resources to support each of the five models; prototype test individual resources; prepare for prototype test of total model.
2. Modify training programs for teacher educators to explicate basic philosophy of each of the 5 models.
3. Obtain reactions from educators to model specifications through national conferences (ACRA pre-session, AACTE, ASCD, APA).
4. Develop assessment system which is consistent with each of the five models, and which considers both impact of the training program on teachers and on their students.
5. Analyze models for generic competencies, distinguishing competencies, interrelatedness, and potential for a unified training program.
6. Institutions which are to conduct prototype tests of each model select students, faculty, train faculty, specify procedures for prototype tests.
7. Initiate study of training programs in other professions with emphasis on PBE, and with particular consideration of the 5 models.
8. Modify specification for 5 models for use with varied content areas in secondary schools for school administration, counselors, paraprofessionals, and other educational specialists.

The Five Year Plan

1.0 Models Design and Development

		1	2	3	4	5
1.1	Design specifications for 5 models for elementary school teachers	→				
1.2	Plan for development and testing	→	→			
1.3	Develop and/or obtain resources for testing 5 models with prospective elementary teachers		→			
1.4	Prototype test of elementary models			→		
1.5	Field test elementary models				→	
1.6	Second field test of elementary models					→
1.7	Modify specifications 5 models for elementary teachers to use with secondary teachers		→			
1.8	Develop design resources for secondary teachers			→		
1.9	Prototype test secondary models				→	
1.10	Field test secondary models					→
1.11	Modify specifications of 5 models for other educational workers (administrators, counselors, paraprofessionals)		→			
1.12	Develop/design resources for other educational personnel			→		
1.13	Prototype test 5 models with other educational workers				→	
1.14	Field test 5 models with other educational workers					→
1.15	Mid-project evaluation of 5 models (theory, assumptions, hypotheses)			→		
1.16	Fifth year evaluation of 5 models (theory, assumptions, hypotheses)					→
1.17	Other models projected for testing					→
1.18	Analyze models for generalities, differences					→



2.0 Assessment

2.1 Specify assessment design procedure

2.2 Modify assessment procedures for each of 5 models - elementary

2.3 Modify assessment appropriate for secondary programs

2.4 Modify assessment for 5 models for other educational personnel

3.0 Taxomony

3.1 Taxonony developed for each of 5 models

3.2 Taxonony reassessed and revised

3.3 Taxonony related to secondary teachers

3.4 Taxonomy related to other educational personnel

4.0 Training of Educational Trainers

4.1 Design general training program materials for teacher educators

4.2 Modify training programs so they reflect basic philosophy of each of the 5 models

4.3 Train educators at implementing institutions
    4.31 elementary
    4.32 secondary
    4.33 other educational personnel

	1	2	3	4	5
5.0 Involve Other Professions					
5.1 Representatives of other professions (e.g., law medicine, engineering) explore PBTE		→			
5.2 Representatives test specifications of 5 models for viability for them, modify			→		
5.3 Design/develop materials for prototype test				→	
5.4 Prototype test of salient aspects of 5 models					—
5.5 Assess viability of models for other professions					—
6.0 Disseminite Results					
6.1 Progress reports made to professional conventions	—	—	—	—	—
6.2 Profession reacts to models specifications		Δ Δ		Δ Δ	
6.3 Profession reacts to prototype and field test results			Δ	Δ	Δ
6.4 Profession reacts to taxomony		Δ	Δ		Δ
6.5 Profession reacts to assessment procedures		Δ		Δ	Δ
6.6 Materials from 5 models limited available for training				→	
6.7 Materials generally available					—
6.8 Teacher educator training generally available	—	—	—	—	—

The First Year

For Year One, this project will include three phases: (1) Organization and Preparation, (2) Model Development Summer Institute, and (3) Dissemination.

Organization and Preparation. The purpose of this first phase is to prepare for the four-week summer institute in which model designs will be formulated. Leaders and participants will be identified, materials and research collected, and initial orientation procedures completed. The following time line and activity chart outlines tasks to be accomplished during that time.

	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
1.0 Planning								
1.1 Formulate detailed plans for project	——	→ 15						
1.2 Identify 5 Model Development Summer Institute leaders, contact them, secure services, determine contractual arrangements.		→ 19						
1.3 Collect Supporting Documentation	——	——	——	——	——	——	——	→
2.0 Leader Orientation and Planning								
2.1 Orient 5 MDSI leaders			Δ 8-9					
2.2 Plan Logistics of summer institute			Δ 8-9 ——	Δ 5-6				
2.3 Identify MDSI participants, contact them, secure services			Δ 8-9 ——	▲ 12				
3.0 MDSI Participant Orientation and Planning								
3.1 Orient MDSI participants				Δ 19-21				
3.2 Plan for working relations within and among task forces				Δ 19-21				

		Personnel
1.0 Planning		
1.1	Project plans detailed, including logistics and location of summer institute, overall plans and expectations for the total project, responsibility delineation for coordinating committee members, and working relations in project (inter-coordinating committee and inter-task forces; intra-task forces and between coordinating committee and task forces.	Coordinating Committee
1.2	Professionals who have expertise with each of the five models will be identified, a list of those to invite to lead a task force formulated, leaders contacted and services secured for the summer conference.	Coordinating Committee in consultation with teacher education leaders
1.3	Documents and research related to model building, teaching effectiveness, and the 5 models will be collected into a working library for MDSI participants.	Project director, secretary, Coordinating Committee, Task Force chairmen and participants.
2.0 Leader Orientation and Planning		
2.1	(Two 2-day conferences) MDSI Task Force leaders will have project described and expectations again outlined for them.	Coordinating Committee, Task Force Chairmen
2.2	Logistics of the MDSI outlined for Task Force Chairmen, then refined on basis of their imput, additional resource needs specified, working relations defined.	Task Force Chairmen, Coordinating Committee

2.3	Tentative list of Task Force participants made (theorist, teacher, educator, curriculum specialist on each team), contacted, and services secured.	Task Force Chairmen, Coordinating Committee

3.0 MDSI Participant Orientation and Planning

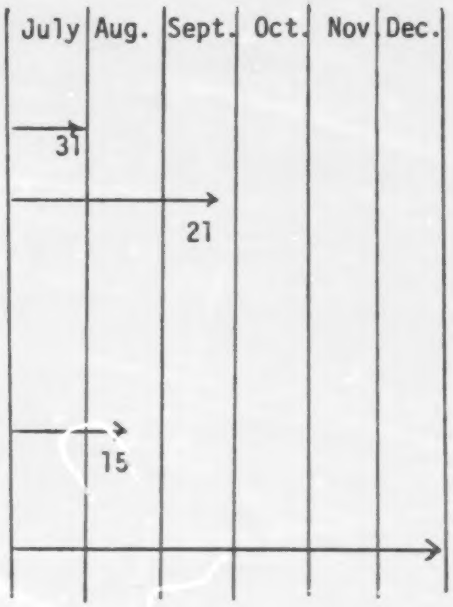
3.1	(One 2-day conference) Orientation, team building project organization, and conference expectations outlined for participants.	
3.2	Logistics of working relations among Task Forces and within Task Forces worked out. Plans for preparation for conference and individual assignments made.	

Model Development Summer Institute. This four-week Institute would engage a number of competent professionals in the process of designing and writing specifications for the five models, detailing resulting teacher competencies, then specifying appropriate taxonomies and assessment procedures.

Continued Planning and Dissemination. The modeling and taxonomy design phase is the first of a series of research and development stages. Concurrent with more specific plans for further development would be a coordinated dissemination strategy to the professional community. A gantt chart of these two phases follows.

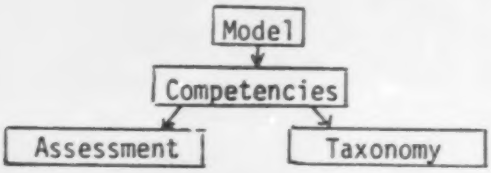
4.0 Model Development Summer Institute
  4.1 Models developed
  4.2 Model specifications duplicated

5.0 Continued Planning and Dissemination
  5.1 Plans for Phase 3, 4, and 5 of project implemented
  5.2 Dissemination of MDSI efforts initiated.



4.0 Model Development Summer Institute

During 3-week institute, specifications for model and taxonomy drawn. Process diagrammed as below:



The basic model (including assumptions, propositions, hypotheses, research and literature, rationale, and basic dimensions) would be described more specifically as teacher competencies, then these in terms of assessment capabilities and a taxonomy for that model.

5.0 Continued Planning and Dissemination

5.1 While this phase would initially be planned in 1.1, after the MDSI, they would be reviewed and revised to incorporate new visions.

5.2 Dissemination plans initiated including a publication, programs on national professional conferences, and individual contact with program designers.

Year Three

1. Prototype tests each of the 5 models with prospective elementary teachers.
2. Delineate potential of models for other educational workers and for other professionals (e.g., medicine, law, engineering).
3. Conduct mid-project analysis of models to ascertain whether unique characteristics are identifiable in teaching practice, under what conditions, with what student and teacher populations, and in what instructional contexts.
4. Institution to conduct prototype tests for Secondary School teachers select students, train teacher education faculty, and specify procedures for training.
5. Develop/design materials for secondary school prototype test of 5 models.

Year Four

1. Conduct field tests of each model for evaluating teachers. Field tests based on modifications resulting from assessment of prototype tests.
2. Prepare for Prototype test of each of the 5 models with other professionals.
3. Assess the impact of each model on teacher trainees, the school environment, and on the students they taught during prototype testing.
4. Refine assessment procedures and instructional resources for elementary program.
5. Prototype test secondary program for 5 models and program for other educational workers.

Year Five

1. Reassess model specifications on the basis of field testing, reconceptualize philosophic and theoretical bases of each, competencies in each, assessment procedures, and taxonomies. Synthesize and also differentiate unique characteristics.
2. Continue research on impact of each model on teachers, environment, and students.
3. Conduct second year of field-tests with elementary teachers.
4. Conduct training for teacher educators employing the 5 PBTE models.

Year Five (continued)

5. Conduct field-tests of the 5 models for training secondary teachers and other educational workers.
6. Disseminate models, materials, and leadership training procedures to the profession.

Appendix F

A Program of Training Institutes for Managers of Performance-Based Teacher Education Programs

The plan for the Training Institutes is organized into four cycles.

Cycle I:	Develop, conduct, and assess a prototype training institute (one year).
Cycle II:	Revise and modify prototype of institute, retest, and assess (one year).
Cycle III:	Formalize institute's program; schedule on regular continuing basis (two years).
Cycle IV:	The management training format will be modified and revised depending upon the data received from the ongoing assessment of the program and its effects in the field.

Plan for Cycle I: (3 stages)

Phase I:	Planning and designing the prototype institute.
Phase II:	Conducting the prototype institute.
Phase III:	Assessing outcomes and input for Phase II.

Phase I: Planning and designing the prototype model. (estimated duration - 7-8 months)

A. Estimated personnel requirements

Task force of 5 persons, plus chairman, a member of the Coordinating Committee of the National Commission on Performance-Based Education.

Task Force personnel:

1. Experience in PBE program implementation and management.
2. Currently involved in some phase of PBE management.
3. Willing and available to develop, conduct, and assess prototype training institute.

Suggested candidates: Drs. Hugh Baird, Brigham Young University; Caseel Burke, Weber State University; Herbert Hite, Western Washington State; Gil Shearron, University of Georgia; and Richard Hersh, University of Toledo.

B. Estimated budget requirements (7-month period)

1. Task force personnel (5 total) based on formula of $150.00 per day 4 days per month over 7 months	$21,000.00

- a. design of training program
- b. estimated length of institute
- c. date and location for institute
- d. number of participants

3. Review development of instructional modules.

3rd month:

Task Force committee assembles to complete the following:

1. Continue development of program format.
2. Select instructors for institute.
3. Set qualifications for participants.

4th month:

Task Force committee assembles to:

1. Review training program format.
2. Assign particular parts of program for revisions.
3. Finalize list of participants (confirmation of acceptance).

5th month:

Task Force committee assembles to:

1. Make second revision of training program format.
2. Assemble materials for portfolios provided for each participant.
3. Revise time schedule of institute program - complete and ready for printers.

6th month:

Task Force committee assembles to:

1. Make final revisions of training format.
2. Review special assignments of Task Force members.

7th month:

Task Force committee assembles to:

1. Provide Coordinating Committee a progress report on plans for the training institute and work of Task Force during the planning period.

2. Provide a detailed description of training program, objectives, competencies to be achieved activities, and assessment procedures.

3. Make any last-minute modifications of institute's program (procedural, not substantive).

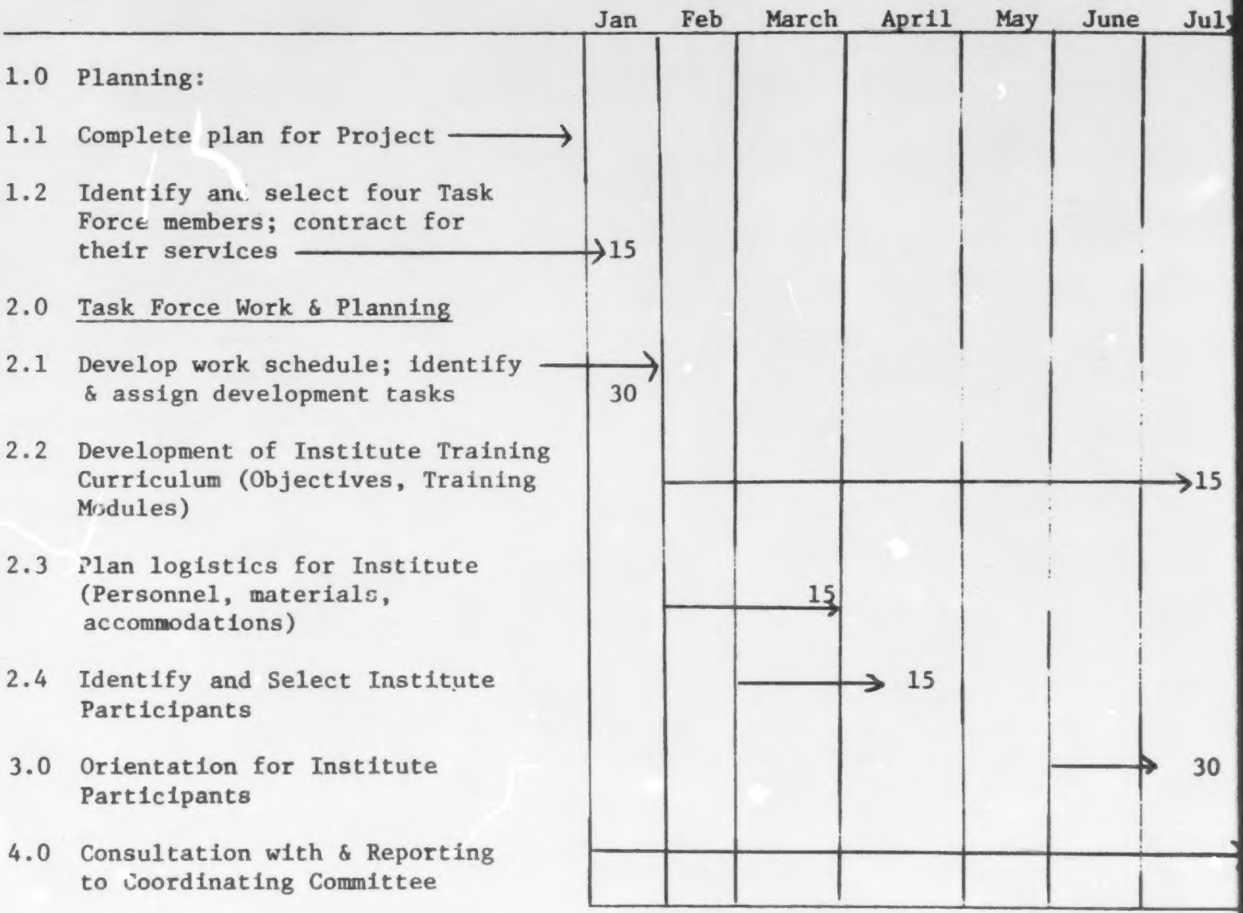
8th month:

Phase II of Cycle I: The Conducting of the Training Institute. (2 weeks)

Phase III of Cycle I: Assessment of training institute's outcomes, to be utilized as input for modification and refinement of the second institute.

GANNT CHART FOR CYCLES I, II, AND III

Cycle I: (Phase I Planning, 7 Months Duration)



Cycle I: Phase II Conducting the Institute
August: Duration 3-4 weeks

	July	August	Sept.
8.0 Conducting Management Training Institute (3 - 4 week session)	→	1-27	

Cycle I: Phase III: Assessment of Training Institute
and Dissemination of Information
(4 months duration: Sept. - Dec. 1973)

	Sept.	Oct.	Nov.	Dec.
6.0 Assessment of Institute Operation by Task Force				
6.1 Follow-up Participants				
7.0 Publication of report of 1st Year's Institute				

Appendix G

Plans for a National Information Clearinghouse on Performance-Based Education

For Year One, this project will include six kinds of activities:

1. Preparation
    - a. Establish the center -- obtain personnel, physical facilities and equipment.
    - b. Establish relationships with
        - (1) other collection agencies, e.g., the University of Houston and the University of Miami (instructional modules); Indiana University (training materials);
        - (2) other Commission-sponsored projects
2. Policies and guidelines

    Establish policies and guidelines for the collection and processing of information.
3. Collection of documents, slide/tapes, video tapes

    Begin the collection of pertinent documents about existing and emerging performance-based education programs, experiments, pilot studies, and research activities.
4. Initial survey of higher education institutions and other agencies regarding status of PBE and PBTE
    - a. Determine kinds of information and data needed.
    - b. Relate to the preliminary survey now being conducted by AACTE.
    - c. Develop the instrument.

d. Conduct survey.

e. Analyze findings.

f. Prepare report.

5. Development of educational exhibits and training packages

Begin the development of educational exhibits and training packages about PBE and PBTE which could be utilized at institutions, conferences, workshops, etc.

6. Dissemination

Information and documents will be disseminated through either the ERIC Clearinghouse or IED -- or regular project channels.

For Year Two, Three, and Following, the National Information Clearinghouse on PBE will continue to collect, process, and disseminate information as required by the needs of other Commission-sponsored projects and as dictated by the state of the movement itself.

A NIC/PBE will require personnel to man the operation, facilities to house it, and equipment, supplies, and services to support the ongoing activities.

Appendix H

A Program For a National Survey and Analysis of Current PBE Programs and Resources

A primary initial thrust of the National Commission will be the development and dissemination of an accurate, up-to-date picture of the movement toward performance-based education. A joint AACTE-ETS task force will be created to plan, organize, and administer the overall management of this effort.

Such information regarding the current state of the PBE movement is essential if the National Commission is to succeed in its goal of meeting the real needs of the movement without duplicating the efforts of currently successful programs. We anticipate, however, that the long-range impact of the activities of this task force will be based not only on its initial diagnostic function but also on the dissemination of its findings.

This Communications Task Force will be basically a second level management group that will coordinate the activities of a number of ad hoc task forces that will carry out the more specific goal-directed activities in this area. The basic functions of the task force will include:

1. Monitor and coordinate survey and assessment task forces.
2. Coordinate liaison activities between the National Commission and the task forces.
3. Set specifications for all survey instruments and strategies to insure the quality of the survey and the building of an accurate description of both the national scene and the processes used in the creation of its components.
4. Produce and disseminate appropriate publications related to task force activities.
5. Develop a plan for continual updating of survey and assessment products.

Estimated first-year costs for the operation of this task force are $75,000.

Activities

Activity Number One

Validate and upgrade current State of the Scene paper

1. to serve as a major resource for the National Commission
2. to serve as a basic document for Survey and Assessment Task Forces

People/Places:	United States Office of Education Schmieder, Ardike

Cost: $1,000

Activity Number Two

Identify and describe the purpose and range of current PBE information instruments and systems, e.g., Interstate Consortium Newsletter, AACTE Committee publications. Analyze their combined coverage and impact. Recommend needs to filled, and alternative systems.

People/Places:	AACTE/ETS Task Force Staff

Cost: $2,000

Activity Number Three

Strengthen ties among professions who are interested and involved in PBE.

1. Survey other professions for PBE-related materials and activities.
2. Develop a strategy for involving leaders from other professions in PBE-related activities.

People/Places:	Persons from both teacher education and other professions now working on performance-based programs.

Cost: $75,000

Activity Number Four

Assess the state of the scene for each of the 50 states and facilitate the development of more effective intra- and inter-state information communication networks.

1. a) Develop a prototype state assessment and communication plan and network (build on TISP/TERC).

   b) Develop a plan for inter-state sharing (build on ERIC/NCES).

   c) Develop ways for "outside" groups to link into the state and national plan.

2. Develop and conduct a workshop for all interested states on a), b).

3. Develop a strategy for linking national resource network to state network channels.

4. Support workshops a) by prototype state for other states and b) by interstate network and/or Multi-State Consortium.

People/Places:	Multi-State Consortium Ted Andrews

Cost: $100,000

Activity Number Five

Sponsor a series of National "Survey" Conferences

1. Of leaders in survey research to plan search strategy.

2. Of leaders of movement to clarify procedures and specifications and to provide and exchange information.

3. Other.

People/Places:	Coordinating Task Force - AACTE ETS

Estimated Cost: $45,000

Activity Number Six

Identify international resources and establish international communication network.

Communications with international education has finally reached a promising state -- some of that communication has been about PBE related programs (Munich module festival, for example). There would be great advantage to 1) surveying useful resources overseas and 2) developing appropriate mechanisms for international sharing of PBE developments.

People/Places: University of Wisconsin, Vere DeVault
Florida International, Wes Sowards

Estimated cost: $50,000

Activity Number Seven

Identification and description of developments in areas outside of the PBE movement that could usefully be applied to PBE programs; e.g.:

1. management information systems
2. competency storage and retrieval
3. assessment centers
4. module development
5. CAI
6. Other

Estimated Cost: To be estimated on an ad hoc basis.

Activity Number Eight

Conduct a national survey of states, universities, and/or school districts to determine:

1. What materials are available - their strengths and weaknesses.
    a. Identify strong materials development centers.
    b. Develop a strategy for strengthening materials development effort.
2. To identify as many PBE products as possible through the use of current national information networks and to explore and estimate the utility of these systems for use in a national PBE communications network. Recommendations will be made for specific ways in which the National Commission can influence these existing systems toward PBE needs and priorities; i.e., in instruments used, subjects highlighted, places surveyed, etc.
    a. National Assessment Program
    b. ETS
    c. NCES
    d. NGA Research Division

People/Places:	Far West Laboratory University of Houston Kettering Foundation AACTE Performance-based Committee Texas SEA

Estimated Cost: $130,000

Activity Number Nine

Literature search on key CBE issues, e.g. inservice incentives, behavior modification, computer storage and retrieval systems, etc. Build as much as possible on existing literature searches, i.e., "Inservice Training of Teachers as Behavior Modifiers, Review and Analysis," by Herbert Todd Eachus.

People/Places: ERIC (Education)

Cost: $60,000 (25 issues @ 2,000)

Activity Number Ten

"Related resources" literature search -- identify and describe products, systems, etc. not central to PBE but of considerable significance to R & D efforts, e.g. needs assessment modules, individualized instruction, management systems, and outcome oriented training programs in business and industry.

People/Places: ERIC (Education)

Estimated Cost: $60,000

Products

1. An accurate, revisable "state of the scene" document - a flexible, loose-leaf, "monograph" for limited use, e.g. by the National Commission and other leaders of the movement.

2. A Journal of Case Studies of more successful programs for widespread dissemination - again in a flexible, loose-leaf format so it can be changed regularly and be used as an effective two-way communication system for the national leaders in research and development in performance-based education.

3. A consultant system for performance-based education.

4. A Journal of Performance-Based Education which will focus on conceptual questions.

5. A national newsletter which will emphasize the sharing of activities in performance-based education (develop along the lines of the Multi-State Consortium's PBTE newsletter).